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Economic Research Studies of the Economic Development Administration

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An Annotated Bibliography 1974–1978

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Economic Research Studies of the Economic Development Administration

An Annotated Bibliography 1974 - 1978

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U. S. DEPARTMENT OF COMMERCE
Philip M. Klutznick, Secretary

Robert T. Hall, Assistant Secretary
for Economic Development

Victor A. Hausner, Deputy Assistant Secretary
for Economic Development Policy and Planning

Foreword

This Annotated Bibliography provides a comprehensive listing of the research supported by the Economic Research Division of the Economic Development Administration (EDA) from 1974 to 1978. It serves as a companion piece to an earlier volume which covered the period 1965–1973. EDA will publish research bibliographies for 1979 and 1980 in Fiscal Year 1981.

This bibliography should prove helpful to those concerned with obtaining information on the regional and local economic development problems of the Nation. The subject classification system developed for this publication will prove very useful to the researchers and practitioners of economic development who need a framework for quick reference to the numerous and varied research efforts of the past years.

The preparation of this document required the dedication and contributions of many people, including Victor A. Hausner, EDA Deputy Assistant Secretary for Policy and Planning, through whose leadership the report was prepared.

This volume is dedicated to Dr. Jeanne McFarland, the director of the Economic Research Division, who passed away as the volume went to print. Dr. McFarland has contributed much to the advancement of the Nation's economic development efforts. Her talents and enthusiasm will be sorely missed.

Robert T. Hall
Assistant Secretary for Economic Development

Introduction

Federal economic development programs are concerned with the spatial or geographic dimensions of national economic performance. What are the impacts of structural economic changes on the economies of multistate regions, States, substate areas, communities and even neighborhoods, and the economic well-being of their residents? What public actions can and should be taken to address the economic disparities between regions and between communities, to ameliorate the economic distress of regions and communities and particular populations within those areas, and to promote the development of strong regional and local private economies and private sector job opportunities?

In the post World War II years, for the most part a period of strong national economic expansion for the United States, the emphasis of Federal economic development programs has largely been a concern for a more equitable distribution of economic activity, income and jobs, first with regard to the underdeveloped rural areas of the country experiencing outmigration of population and more recently with regard to the mature industrial areas experiencing a decline in manufacturing activity and population. However, recent concerns about U.S. national economic performance, e.g., more modest economic growth, declining productivity, persistent inflation, impacted basic industrial sectors, and increased foreign import penetration, have fostered renewed interest in the developmental aspects of regional programs to more fully employ underutilized human and physical resources—a return to the beginnings of our Nation and the use of public investments to geographically expand economic growth.

The following annotated bibliography is intended as a quick reference to the substantial volume of research supported by the Economic Research Division (ERD) of the Economic Development Administration since 1974. But more than that it is a record of the recent evolution of Federal economic development concerns and the increasingly effective attempt to design a research strategy which is supportive of Federal economic development policy and program formulation and the improved practice of regional and local economic development.

With rare exceptions—Appalachia is one—regional economic development in the United States has not focused on multistate economic regions, but rather on local economic investment. This is the case even with development supported by multistate institutions. EDA research has attempted to remedy this situation with substantial attention to the economic trends and problems of most of the major multistate regions of the United States. Regional economic trends and their impacts on local economic health now play a far more prominent place in economic development policymaking. EDA has also supported an increase in the research and planning capacity of regional development organizations.

The concerns of the 1950's and 1960's with rural underdevelopment, economic distress and population outmigration were joined in the 1970's by rising urban economic and fiscal distress related to structural and geographic changes in the manufacturing base of the Nation and the concentrations of poor and structurally unemployed populations in central cities. EDA has devoted substantial attention to the analysis of urban economic problems and their relationship to sectoral trends. What are the alternative economic futures open to the Nation's cities?

EDA has also continued to address rural economic change with particular attention to recent trends of industrial and population migration to nonmetropolitan areas, the benefits of such growth for the rural underemployed and unemployed, and the impacts of Federal economic development investments on distressed rural areas.

We have been concerned at EDA with exploring subnational economic problems at all of the critical geographic levels—multistate regional, State, urban, and rural—and examining their interrelationships. The context and constraints for public intervention at various geographic levels must be established if economic development programs are to be successful.

Targeting Federal development assistance to those areas and communities most in need and where only concentrations of assistance can be beneficial, has become increasingly important, particularly in a period of inflation and tight budget limitations. EDA's research program has addressed the question of data availability and appropriate indicators of economic distress. The Agency has been concerned with differentiating between various forms of economic distress, cyclical and structural, underdevelopment and economic decline, and assessing the severity of sudden economic adjustment problems. Such work on economic indicators is essential to the development of sound eligibility and investment criteria.

Much attention has been given to the variety of factors impacting regional and local economic development. The availability and price of natural resources such as energy and water have been a major concern, including a major study of the decline of nonrenewable water supplies in the High Plains region, drought management, and the interregional impacts of rising energy costs. The effects of government regulatory practices, particularly environmental regulations, on business investment and economic growth have received increasing attention as awareness has grown of the linkages between public programs, the inadvertent consequences of public actions, and the need for assessments of the trade-offs between multiple public policy objectives. This research has supported the progress being made in economic impact analysis of public programs and the improved coordination of diverse public programs with local economic development consequences, e.g., transportation, environmental, and public works.

Structural changes in the U.S. economy with significant regional and local economic consequences have been another area of research emphasis. Work has been done on recent sectoral trends in the U.S. economy and what they portend for regional economic adjustment, for manpower displacement, and for new local economic growth and job creation opportunities. Such information should contribute to economically sounder regional development strategies and a more effective coordination between Federal economic development efforts and new industrial policy initiatives.

The provision and maintenance of public infrastructure, e.g., transportation, waste treatment facilities, are activities essential to the viability of an area for business investment. EDA research has examined the public facilities support systems for business investment as well as other location factors affecting this investment, such as taxes and labor force availability.

EDA-funded research has also explored the variety of types of economic problems which affect areas and communities, including underdevelopment and the conditions for industrialization, chronic economic decline confronting mature economies, severe economic adjustment problems resulting from business closures, changing trade relations, obsolescent industrial facilities, etc., which can engender chronic economic problems, and the geographically differential impacts of the business cycle. Again the policy benefits of such research are to enable public development practitioners to guide their investments with sounder investment strategies customized to the various forms of economic distress.

EDA has been particularly concerned with developing the capacity of State, area, and local agencies and organizations to plan for and implement effective economic development programs. Without institutional capability economic need and investment opportunities are insufficient to accomplish economic development.

A substantial portion of EDA-funded research has been devoted to the subject of development planning, the data that are needed to plan for public economic intervention, planning tools, techniques, and methodologies, and intergovernmental planning coordination. As economic development has risen on the agendas of all levels of government, increasing attention must be paid to the state-of-the-art if we are to improve public development practices. Particularly important is the ability to prepare regional and local investment strategies with which to guide the long-term coordinated investment of public resources to leverage targeted business investment.

An adequate regional and local economic data base is essential to the practice of economic development. At all levels of government there has been a paucity of data beyond the few general economic indicators such as unemployment and income data. Public development practitioners require geographically differentiated information on such factors as business investment and location patterns, employment by industry and skill level, credit availability, infrastructure investment and condition, population movement, industry trends, resource pricing and availability, and labor force composition. EDA-funded research has encouraged the increased use of Bureau of the Census, Bureau of Economic Analysis, social security, private business profiles, and other data sources in support of creating an adequate microeconomic data base.

The last several years have also seen increasing awareness of credit availability as a factor in business investment and expansion, particularly of small and moderate-sized firms and new ventures in distressed communities. Direct business assistance through public loan guarantee programs, the tax structure and other means has grown as an important programmatic component of regional economic development—balancing the traditional use of public works. An important emphasis of development research has been on business credit needs, the geographic performance of credit markets, and the design and effectiveness of business finance assistance tools and institutions.

The more traditional area of public infrastructure as a development tool has received renewed attention as a result of concerns about trends in U.S. public capital investment, the condition of infrastructure in development areas, the role of major infrastructure investments as a force for regional development, the value of public works as a targeted countercyclical tool, the differing development benefits of various types of public facility improvements, and the costs of public infrastructure to support economic sprawl. EDA-supported research has been actively concerned with all of these questions.

New attention is also being given to the differing development benefits resulting from different size businesses. How much emphasis should be placed on the modernization and retention of established and larger firms as opposed to assisting small businesses and new ventures? What roles do various sized businesses play in economic growth, employment creation, and technological innovations and productivity improvements? More recent concern with national economic competitiveness and the contributions economic development can make to national positive adjustment has added to the interest in identifying the appropriate businesses for development investment.

The historical tension between the development objectives of strengthening area economies and assisting economically disadvantaged populations has also influenced the EDA research agenda. Research has been directed at the role of manpower training and vocational education in linking the labor supply with job creation efforts. The problems confronting minority entrepreneurs, the employment situation of women and minorities in various industrial sectors, and the benefits of various development projects for the unskilled and semi-skilled workers have all been addressed by research.

EDA has also been most interested in comparing U.S. and foreign regional economic development experience, the policies, programs, institutions and tools and their effectiveness, and establishing a dialogue with our foreign colleagues. European experience in regional economic development has been substantial and can provide valuable lessons for the United States.

These highlights of recent EDA-supported research provide a good map of this burgeoning field of public policy. But the challenge to a Federal economic development research program is more than that of selecting the proper subjects for research. The EDA research program has three major objectives:

- to help provide the conceptual framework, methodologies, and data necessary for analyzing structural economic change and its relationships to subnational economic distress;
- to aid in the design and implementation of more effective Federal, State, and local economic development policies and programs which foster balanced national economic growth and development and contribute to the vitality of the Nation's economy;
- to provide training and support to students, practitioners, and researchers which will improve the practice of regional economic development.

The EDA research program has over the last several years contributed to a better understanding of and interest in our country's subnational economic problems, to the development of more effective Federal, State, and local economic development programs, and to the training of a new generation of economic development policymakers and practitioners. These accomplishments, I believe, have assisted in the progress regional economic development has made to a place of importance in national public policy.

Most of the research described in this bibliography has taken place at universities and private research institutions, with financial support from ERD. Some of the research has been undertaken directly by ERD staff. In all cases, the research has been motivated by a desire to improve our understanding of subnational development problems, as well as our capacity to resolve them.

Within each subject area, all related EDA research studies are annotated. The annotations were prepared for EDA by the Potomac Institute for Economic Research under the direction of Dr. Bradley R. Schiller, president. The annotations contain brief summaries of the purpose, method, and findings of each study. All findings, recommendations, and conclusions are those of individual authors; they do not necessarily represent the views or policy positions of EDA.

An addendum and indexes to aid the user also appear at the back of the bibliography as does ordering information for the annotated studies.

Victor Hausner

Victor A. Hausner
Deputy Assistant Secretary for Policy and Planning
Economic Development Administration

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I. Urban

EDA has taken decisive action to develop research initiatives in the area of public policy for urban areas. EDA has been interested not only in defining and measuring the problems of urban areas, but also in assessing various public policy responses to those problems. Significant contributions to the field of urban development economics include analyses of the ever-changing economies of cities, attempts to classify cities according to their levels of economic and fiscal distress, and several studies discussing public programs and urban areas.

Much of the recent research focuses on documenting the severity and causes of urban decline. Urban decline is reflected in absolute or relative losses of employment, income, population, housing stock, and/or infrastructure in urban areas. These losses may result from out-migration of jobs, a reduction in the rate of firm formation or growth, a change in the job mix, or other causes. Among the potential policy responses to urban decline are business assistance, infrastructure development, manpower training, revenue sharing, and encouragement of metropolitan planning.

I-1. *Title:* Central City Economic Development
Author: Benjamin Chinitz, *et al.*
Organization: The State University of New York (Binghamton)
Date: June 1978 *Pp.:* 183 *NTIS:* PB 283 869 *Price Code:* A09

Purpose: To present an overview of urban economic development issues.

Method: The study encompasses thirteen papers and/or speeches from a conference held at the State University of New York at Binghamton on October 17-18, 1977. Trends and prospects of central city economic development are reviewed. The Federal, State, and local roles in economic development of the city are highlighted.

Findings: Several observations and conclusions from the various presentations are: (1) The central cities of the U.S. have declined absolutely and relatively in demographic and economic terms; (2) The key to urban development is capital placement with substantial community group involvement; (3) Federal assistance must be reoriented towards problems rather than being project-specific; (4) The urban problem is linked to racial discrimination; and (5) The Federal Government's anti-urban bias must be alleviated.

I-2. *Title:* Block Grants for Community Development: Decentralized Decisionmaking
Author: Paul R. Dommel
Organization: The Brookings Institution
Date: June 1978 *Pp.:* 39
Draft copy available from Economic Research Division, EDA, while supply lasts.

Purpose: To assess the efficacy of the Community Development Block Grant Program.

Method: Provides an analysis of the Community Development Block Grant (CDBG) program, including a review of earlier categorical grant precedents, the distributional impacts of the CDBG on both urban and regional areas, and the continuing issues and larger policy implications for urban development. Also reports on and analyzes several studies dealing with different aspects of the CDBG program, including impacts of the 1974 formula distribution system and the effectiveness of the dual formula system. The data and experience cited originated from the first two years of a Brookings Institution study that has monitored six years of the CDBG program.

Findings: The newer dual formula of 1977 appears to have targeted funds more effectively to the older, declining cities, many of which are located in the Northeast quadrant, while at the same time keeping allocations constant to other regions. This result contrasts with earlier categorical grant programs that resulted in funds going to more affluent or newer growing communities at the expense of older, declining cities, and the single formula allocation system in 1974 that resulted in non-effectual targeting of money towards distressed jurisdictions.

In the first two years of the CDBG program, there appeared to be a tendency towards reduction in commitments to urban renewal and model cities and a trend towards neighborhood conservation. CDBG has substituted representation of local preferences for Federal preferences in decisionmaking.

I-3. *Title:* Urban Economic Development Strategies: Improving Economic and Fiscal Performance, Volume I (see entry I-8 for Volume II)
Author: Harvey A. Garn
Organization: The Urban Institute
Date: September 1978 *Pp.:* 144 *NTIS:* PB 298 045 *Price Code:* A07

Purpose: To provide an overview of strategic options open to the Federal Government in the area of urban economic development, to classify cities on the basis of their economic and fiscal performance, and to identify those characteristics of local economies and public intervention strategies which will increase the probability of successful intervention.

Method: Economic development policies are evaluated in the context of: 1) their reliance on macro- or microeconomic instruments, 2) their orientation toward demographic or geographic targets, 3) their concern with increasing the demand for labor or with redistributing the labor force, 4) their use of capital subsidies or wage subsidies to create jobs, and 5) the effect of local industrial structure on the achievement of development goals.

U.S. cities with population 100,000 or more are ranked according to an index of economic distress incorporating changes in employment and per capita income, and a fiscal distress index incorporating long-term debt, per capita expenditures, and tax burdens.

Cluster analysis is used to identify similar patterns of economic and fiscal performance.

Findings: Urban economic development policies must include micro- as well as macroeconomic elements, because the adverse regional and local impact of cyclical variations in employment and income may persist in spite of countercyclical macroeconomic measures. Macro policies alone may fail to achieve full employment, or achieve it at an unnecessarily high price because of structural bottlenecks.

While individual-oriented transfer programs are necessary to provide income support to those who cannot work, geographically targeted job-creation or relocation programs are also necessary to assure that potential labor force members can find jobs. Transfer programs should incorporate a work incentive.

Although relocation programs may be effective when suitable vacancies exist elsewhere, they cannot be regarded as a general solution to employment problems. The relatively immobile, low-skill, low-wage members of the labor force identified as the target group for employment policies are the least able to profit from current tax credits for relocation and may find that their low skill level is a barrier to employment even after relocation. For this reason, job creation may often be the only viable development alternative.

While both public service employment and residential policies designed to attract middle-income people by upgrading services may be partial solutions, job creation in the private sector will be required. Wage subsidies merit serious consideration because they can be selectively targeted and offer a direct incentive to employ members of the target group. Capital subsidies are of doubtful merit and may even aggravate an existing tendency among employers to favor capital-intensive production methods, substituting capital for labor.

Industry mix is important to development prospects, but no one combination of industries assures favorable results at all locations or promotes all policy objectives at a given location.

Economic distress is correlated with city size and location, large cities and cities in the New England, Middle Atlantic, and East North Central States being most affected. Fiscal distress is correlated with city size but less tied to regional location. Fiscal distress need not accompany economic distress.

More research is needed on the relationships between city performance and industry structure, firm behavior, and labor force characteristics.

I-4. *Title:* Metropolitan Prospects in the Context of the Changing Distribution of Industry and Jobs
Author: Harvey A. Garn and Larry C. Ledebur
Organization: The Urban Institute
Date: November 1978 *Pp.:* 63 *NTIS:* PB 298 048 *Price Code:* A04

Purpose: To evaluate urban performance and prospects in the context of a changing mix of industry and employment.

Method: An index of economic distress that considers income, the unemployment rate, their respective rates of change, and the change in the number employed is developed. This index is used to classify cities into a most-distressed, least-distressed and an intermediate group. Comparisons of economic performance are made among these urban groups on the basis of employment size, industrial composition, and the presence of industries that have high value added. Data are drawn from the Census of

Manufactures, County Business Patterns, and Dun and Bradstreet for 147 cities with populations over 100,000.

Findings: The "least-distressed" cities tend to be located in the South, Central, and Western regions. In these regions, employment has tended to increase in manufacturing, retail and wholesale trade, and selected services. Except for selected services, the dynamics of growth appear to favor the suburbs. For "distressed" cities, employment in central cities declined in all sectors except for selected services. While employment in the suburbs of these cities increased, it did not compensate for the central city loss.

The dynamics underlying the changes occurring in the most- and least-distressed urban groups are quite different. For most-distressed cities, manufacturing-to-service shifts occur because of manufacturing decline rather than service growth. In least-distressed cities, the shift away from high value-added employment occurred because these industries, although growing rapidly, grew at a slower rate than low value-added industries.

I–5. *Title:* A Select Review of Urban Economic Development: Observations, Issues, Strategies and Assessments
Author: Peter Greenston and Carl E. Snead
Organization: The Urban Institute
Date: May 1976 *Pp.* 134 *NTIS:* PB 257 403 *Price Code:* A07

Purpose: To identify issues, problems and strategies in urban economic development that may call for public policy responses. Also assesses the degree to which the literature provides a conceptual or empirical basis for choosing among alternative responses.

Method: This literature review deals with regional and intermetropolitan aspects of development. The market forces leading to a realignment of regional economic power are described. Policy responses for easing the resulting adjustment of people and places are then discussed. The problems of the central city vis-a-vis the suburbs are reviewed, particularly the mismatch between job location and residence, as well as revenue sources and government service requirements.

The general approach is to describe the trends empirically and to review the available literature for explanations of the trends and strategies for ameliorating development problems. The study utilizes Census data and numerous other sources. A large bibliography is provided.

Findings: The redistribution of jobs and people from the Northeast and North Central area to the South and Southwest has resulted mostly from regional variations in firm expansions and births. Firm contractions and deaths have remained relatively constant across regions. In addition, service industries, experiencing the fastest growth nationally, are growing fastest in these new areas.

A variety of economic, technological and social factors have caused this shift in regional comparative advantage. Older areas tend to have conflicting property arrangements, a high degree of unionization, a resistance to changes in work standards, and non-competitive (older) production methods. New production techniques favoring small plants and declining truck transportation costs have tended to favor smaller places. These changes in goods-distribution patterns have led firms to land-intensive, single-story facilities and away from metropolitan areas where land costs are high.

Alternative government policy responses to the redistribution problem are public sector investment (possibly financed through revenue sharing) to maintain the viability of older locations, capital or wage subsidies, and increasing geographic and industrial mobility, skills, and education, in order to facilitate long-run adjustment to market forces.

Intra-metropolitan migration has caused central cities to be populated by low-income blacks and minorities and suburbs by middle- and upper-income whites. Firm relocations have placed blue-collar manufacturing jobs in the suburbs and skilled professional jobs in the cities. This mismatch has led to fiscal problems for central cities. Fragmented systems of government have produced spillovers of costs and benefits among jurisdictions, to the detriment of central cities.

Revenue sharing, tax restructuring, and ghetto dispersal programs would help solve these problems.

I–6. *Title:* Development Banking and Financial Incentives for the Private Sector
Author: L. Kenneth Hubbell
Organization: University of Missouri—Kansas City
Date: June 1978 *Pp.:* 49

Draft copy available free from Economic Research Division, EDA, while supply lasts.

Purpose: Evaluates the potential effectiveness of the proposed National Development Bank Act in arresting urban decline. Also discussed are the equity and efficiency implications of the Bank's operation.

Method: Outlines the economic rationale, objectives and policy instruments, structure, and eligibility criteria of the National Development Bank proposal. The impacts and effectiveness of loan guarantees, interest subsidies, capital grants, and tax-exempt industrial development bonds are discussed. The author analyzes the adequacy of these financial incentives in terms of factors responsible for urban decline.

Findings: Economic and population declines are inevitable for many cities. The proposed National Development Bank can do little to halt this decline because the interest savings to business will be quite small compared to the gains from relocation. An urban policy that compensates distressed cities for revenue losses due to employment decline is needed. Such aid may be in the form of direct assistance, state or federal assumption of public services, or provision of manpower training programs for the unemployed.

I-7. *Title:* The Quality of Municipal Services, Central City Decline, and Middle Class Flight
Author: Martin T. Katzman
Organization: University of Texas (Dallas)
Date: February 1978 *Pp.:* 106 *NTIS:* PB 282 778 *Price Code:* A06

Purpose: To examine the effect of declining municipal services on urban decline and middle-class flight. The working hypothesis is that "the institutions that produce, distribute, and finance municipal services create external diseconomies that accelerate central city decline and lead to inefficiently high levels of suburbanization."

Method: The conceptual framework of this study is based on residential choice theory. Given an urban environment, families choose a location that maximizes their welfare. The aggregation of individual housing choices affects and is affected by changes in the level of public service quality. The author fills in the framework with a literature review on school enrollment influences, housing demand and municipal services, population composition and mobility, and the feedback effect of urban decline on municipal services. A pilot study of residential mobility in metropolitan Wilmington, Delaware, is also described.

Findings: Because all of the studies reviewed approach the problem differently, there are no definitive findings. However, the author does tentatively conclude that families are sensitive to interjurisdictional differences in fiscal packages. The incentive for the formation of homogeneous communities is stronger the larger the number of jurisdictions and the variations among them in terms of taxation, expenditure, and racial mix. The movement toward intramunicipal equality of public service can result in population movements that can lead to further changes in the interjurisdictional pattern of taxation and expenditure.

I-8. *Title:* An Initial Exploration of the Relationships Between Industrial Composition and Urban Economic Distress, Volume II (see entry I-3, Volume I)
Authors: John Kordalewski and Larry C. Ledebur
Organization: The Urban Institute
Date: September 27, 1978 *Pp.:* 60 *NTIS:* PB 298 046 *Price Code:* A04

Purpose: To examine relationships between the industry mix and changing industry composition of cities and levels and types of urban distress, and to explore directions for furthur research.

Method: Volume I of this series concludes that cities can be classified by type and degree of economic distress. This follow-up study attempts to identify the determinants of urban economic distress. An index of economic distress which considers employment change, income, the unemployment rate, and rates of change in the latter two is used to classify cities into: most-distressed, least-distressed, and middle groups. Comparisons are made among these city groups based on employment size, industrial composition, and the presence of industries that have high value added. Data was drawn from the Census of Manufactures and County Business Patterns on 152 cities with population over 100,000.

Findings: The relationships between level and types of urban distress and industrial composition are somewhat weak. However, the most-distressed cities are larger and have more of their employment concentrated in manufacturing. Least-distressed cities are capturing a greater share of employment overall, within each one-digit SIC industry, and in key high value-added industries. Between 1970 and 1975 the most-distressed grouping experienced absolute growth only in services, finance, insurance, and real estate. These cities are losing their national share of employment overall and in every one digit industry.

The least-distressed cities are passing through two development phases simultaneously: rapid industrialization and the transition to a predominantly service economy.

Further disaggregation of the manufacturing and service sectors is needed to better assess their roles in promoting growth or decline within urban economies. For manufacturing, it is necessary to identify those industries that have both high value-added and high growth in income. For services, an attempt should be made to distinguish between export services vs. domestic support services, and high technology vs. blue collar. These service categories can then be analyzed in relation to levels of urban distress.

I-9. *Title:* The Economic Development Context of Population Distribution Issues
Author: Larry C. Ledebur
Organization: Economic Development Administration (Visiting Scholar)
Date: January 1977 *Pp.:* 36 *NTIS:* PB 269 177 *Price Code:* A03

Purpose: To integrate and summarize the literature on residential preferences and migration motivations.

Method: Two surveys of public attitudes towards population size and distribution are discussed. The changing patterns of population distribution and migration over the 1970–1975 period are examined with tables and graphs. Surveys are again consulted for information on preferred residential locations and their relationship to quality of life indicators. Finally, the determinants of mobility are examined by socioeconomic characteristics, education, sex, age, occupation, and type of residence. A variety of data sources, including public opinion polls, is utilized.

Findings: A majority of Americans express a preference for nonurban residential settings. However, there is a significant difference between preferences and a willingness to act on those preferences due to economic and social constraints. Between fifty and sixty percent of moves occur primarily for economic reasons. The most important factors drawing people to cities are jobs, variety, better schools, and culture. The primary factors for a nonurban setting are: less crime, cleaner air and water, a "healthier" environment for children and lower living costs. The degree of mobility depends on age, educational attainment, income level, and occupational skills.

I-10. *Title:* New York State's Transition to Stability: The Demographic Outlook
Author: Peter Morrison
Organization: Rand Corporation
Date: January 1977 *Pp.:* 38

Working paper available from Economic Research Division, EDA, while supply lasts or from the Rand Corporation (Rand Rept. P–5794).

Purpose: To examine current population trends in New York State. To highlight potential economic and social problems that may be created by these trends.

Method: Fertility, migration, and regional (Northeast) demographic trends are highlighted. Metropolitan and nonmetropolitan population growth rates in New York State are examined. The effects these rates of growth may have on school enrollments and the structure of dwelling units are discussed. Migration into New York City is also examined.

The U.S. Bureau of the Census is the primary data source. The paper was prepared for a conference on "Planning for Change: The Case of New York State," at the State University of New York at Binghamton, November 1976.

Findings: The population of New York State is leveling off. Metropolitan growth has stopped in New York while certain nonmetropolitan growth areas have shown a revival. Rates of changes in the age composition in New York vary widely. Population of school-age children will decline until the mid 1980's. New fiscal and political accommodations in response to the changing demographic trends will entail difficult choices and often conflicting objectives.

I-11. *Title:* The Fiscal Impact of Regional Malls on Central Business Districts in Small Cities
Author: Thomas Muller
Organization: The Urban Institute
Date: December 1978 *Pp.:* 42 *NTIS:* PB 80-125230 *Price Code:* A03

Purpose: To analyze the effects of a regional retail shopping mall on the Central Business District of a city. While city officials have speculated that malls have had a negative impact on the central city, mall developers have argued there are few if any short-term negative impacts and in the long run the Central Business District may actually benefit from the mall.

Method: This is a case study of retail shopping malls in three cities. The impact of the malls on the Central Business District is analyzed in terms of sales tax revenue, the market values of commercial properties, assessment rates and rental values both before and after the opening of a mall. The data are obtained from Census Bureau reports and tax rate/revenue tabulations of the respective cities. Additionally, interviews were held with local public officials. No analysis is undertaken of net fiscal effects at the regional level, nor are second-order effects studied.

Findings: In most cases, the establishment of a regional shopping mall has an immediate, measurable and long-term negative impact on the Central Business District. Sales tax revenues, property values, assessment and rental rates were all adversely affected. Approximately fifty percent of the sales of a regional mall are diverted from the Central Business District.

I-12. *Title:* Private Sector Tax Credits for Urban Revitalization, or Are We Giving Credit Where Credit is Doomed?
Authors: David Puryear and Richard McHugh
Date: June 15, 1978 *Pp.:* 32

Draft copy available free from Economic Research Division, EDA, while supply lasts.

Purpose: Examines the use of federal tax incentives to encourage urban revitalization in terms of employment, investment and fiscal relief.

Method: Reviews the literature on the efficacy of subsidies in stimulating employment. Investment credits and employment credits are discussed both in terms of general subsidies and targeted subsidies with specific urban goals.

Findings: Tax credits have the "potential for undesirable side effects such as reduced employment in the case of the investment tax credit and substitution of unskilled for skilled workers in the case of the targeted employment tax credit." Also, "tax credits bypass the nonprofit sector which accounts for a steadily growing share of economic activity and is concentrated in the cities." However, tax credits allow the market mechanism to work, "avoiding costly mistakes as well as expensive bureaucracies . . . while providing a slight push toward distressed areas."

I-13. *Title:* Bridges to the Future: Forces Impacting Urban Economies
Author: Gail Garfield Schwartz
Organization: Academy for Contemporary Problems
Date: May 1978 *Pp.:* 35 *NTIS:* PB 290 756 *Price Code:* A03

Purpose: Seeks to identify the dominant forces which may help shape the growth of urban economies over the next fifteen to twenty years. These forces will help to determine whether the declines in population and employment registered in many urban areas during the 1970's will continue or be reversed. Public policies for distribution vs. development, human capital development and urban development strategies are discussed.

Method: Discusses four factors that affect the distribution of activities over space: technology (including energy); personal consumption patterns; institutional and structural changes in the private sector; and public policy, including institutional changes in the public economy and in government. Data are used to document the importance of these factors in the past. The data include shifts in urban employment by sectors and regions, changes in urban manufacturing employment by regions, changes in places of work versus places of residence, changes in urban population densities, etc. These data are taken from National Planning Association research, Census of Manufactures data, Census of Population data and other sources.

Findings: All four considerations noted above will affect the future growth of urban areas. As technology advances, firms will tend to locate near product or service markets and near the new scarce resource, energy. The process of "microminiaturization" will lead to the further automation of control processes, and this will erode the locational advantages of urban centers.

Per capita consumption will increase because of smaller but more highly educated families, more working women, greater specialization of workers, etc. An increase in leisure-related expenditures can be expected as incomes rise.

Increased vertical integration will likely increase firms' exodus from cities, as larger plant facilities are needed.

Finally, Federal policies will need to foster more regional cooperation and private investment. Sentiment for limiting the pace at which suburbanization continues may grow in many areas, due to an awareness of the environmental despoliation which accompanies added growth of suburbs and basic resource shortages.

I-14. *Title:* Transportation and Urban Economic Development (2 volumes)
Author: Robert Witherspoon
Organization: Gladstone Associates
Date: November 1977 Volume I: *NTIS:* PB 275 562; *Price Code:* A07
Technical Appendices, Volume II: *NTIS:* PB 275 563; *Price Code:* A07

Purpose: To identify policy, program and administrative initiatives for EDA in the urban transportation field. Also explores the interface of such policies with the U.S. Department of Transportation (DOT) and discusses the role of transportation in urban development.

Method: The transportation and economic development literature as well as selected contacts with consultants are utilized. An interpretative analysis of the effects of transportation on urban economic development is provided. Also discussed are Federal urban transportation aid, DOT programs of possible significance for EDA, and metropolitan area planning.

Findings: The potential benefits of improved transportation infrastructure are constrained by the lack of transportation/development plans and a lack of metro-wide coordination. At present, infrastructure construction only serves to rearrange economic activity. EDA can assist localities in getting the most from transportation infrastructure projects if its emphasis becomes broader than the central city. Transportation projects will have very little impact on poverty pockets.

II. Regional

EDA research in this area has primarily concentrated on identifying and analyzing variations in regional economic performance in the United States and on determining the effects of Federal development programs on these performances.

Specific studies focus on firm behavior, on identifying regional attractions and disadvantages, and on isolating the causes and extent of regional decline or regional growth.

The role of Federal development assistance in the regional economic development process is a focus of several research studies. The results attest to the continued importance of EDA and other assistance in alleviating distress in declining or changing economies.

II-1. *Title:* Revitalizing the Northeastern Economy—A Survey for Action
Organization: Academy for Contemporary Problems
Date: November 1977 *Pp.:* 267 *NTIS:* PB 275 368 *Price Code:* A12

Purpose: To assess the problems and potential of the Northeast economy. Also seeks to assist public and private organizations in identifying some of the next steps in action and research for a long-term economic revitalization program for the Northeast.

Method: This study is based on a field survey of 900 business, labor, government, civic, and academic representatives and a research survey of available knowledge about the Northeastern economy. A general summary of the findings and recommendations for action are highlighted in this volume.

Findings: Various forces have been falsely identified as primary causes of the Northeast's demographic and economic decline; these include the alleged flight of industry to the Sunbelt, purported high labor costs in the Northeast, poor productivity, and allegedly high state and local taxes. Major contributors to the region's problems include: (1) high firm closure rates combined with low firm birth rates, (2) lagging investment for start-up firms and modernization of plants, (3) poorly targeted Federal expenditures, and (4) lack of coherent national policy on regional growth and development.

The structural problems in the Northeastern economy are concentrated in the "mature" urban areas. Hence, a targeted urban development strategy must be incorporated in any viable revitalization effort. Emphasis on new indigenous enterprises in the urban areas should be a major component of the development strategy. Federal policies must be better coordinated. More cooperation between government, business, labor, and the Northeast's civic and academic leadership must be engendered to improve the operation of labor and capital markets.

The Northeast should "build upon the newly existing framework of regional organizations to begin revitalization efforts." Feasible approaches to achieve this objective include the creation of a Northeastern Development Council and/or the establishment of an Intergovernmental Commission.

Forty potential elements for action or research including their cost and phasing are identified. An urban residential strategy, vocational-technical curriculum planning, CETA evaluation, and a transportation modernization plan are several of the elements examined.

II-2. *Title:* Stimulating the Economy of the Great Lakes States
Organization: Academy for Contemporary Problems
Date: December 1977 *Pp.:* 265 *NTIS:* PB 282 742 *Price Code:* A12

Purpose: To survey the economic problems facing the Great Lakes region. Also highlights potential strategies for correcting these problems and stimulating the Great Lakes economy. The report is intended to serve as a guideline for action for the Committee for Great Lakes Economic Action.

Method: The findings and recommendations are derived from two sources: (1) interviews with approximately 800 leaders of business, government, labor, and civic affairs in the Great Lakes region, and (2) an economic and demographic analysis of the region based on existing data and original research on economic interdependencies within the six-state region. The two sources of information are combined and contrasted.

Findings: The growing concentration of unemployment in the central cities is the major problem of the region. Each of the States should undertake a detailed study of workmen's compensation and unemployment compensation laws "to determine the advantages and disadvantages of nationalization of both of these programs for the Great Lakes region."

The high death rate of firms is a primary cause for the region's economic stagnation. Federal incentives for modernization of plants, such as larger tax credits or higher depreciation allowances, should be examined.

Although the region has an abundance of coal, it is high in sulfur content. Federal research and development on the use of high-sulfur coal is needed. Finally, the region has been receiving less Federal grants per capita for sewage treatment facilities. Action to secure additional grants should be initiated.

II-3. *Title:* The South and the Nation
Author: Reubin O' D. Askew
Organization: Governor of Florida
Date: January, 1977
Published in: *The Future of the South's Economy, NTIS:* PB 268 469, *Price Code:* A11

Purpose: To provide an introduction to the Southern Growth Policies Board (SGPB) series of occasional papers.

Method: Each of the occasional papers submitted to the Board is briefly referenced. Stress is placed on the need for a greater and more viable governmental role at all levels in the development process.

Findings: In the future, government must ensure more balanced growth. The total effects of government programs must be considered. An economically sound Nation is a necessary condition for an economically strong South. An attempt to revitalize the North by channeling funds away from the South will only result in reducing total U.S. growth. Policies must address the basic cause for the Northern slowdown.

II-4. *Title:* Economic Transition of Distressed Communities (3 volumes)
Author: Kirkor Bozdogan
Organization: Arthur D. Little, Inc.
Date: June 1974
Volume I —*NTIS:* COM-75-10604; *Price Code:* A10
Volume II —*NTIS:* COM-75-10605; *Price Code:* A09
Volume III—*NTIS:* COM-75-10606; *Price Code:* A04 (appendices)

Purpose: To identify the relative importance of variables affecting regional economic transition or recovery. Also explored is the nature of the economic relationships that emerge in the transition process.

Method: This three-volume report on economic transition in distressed communities provides an interpretative and statistical cross-section analysis of 17 communities. Both descriptive statistics and regression analysis are employed. From this sample 4 case studies (Hopkinsville, Kentucky; Greenville, South Carolina; Lowell, Massachusetts; and Altoona, Pennsylvania) were undertaken to gain an understanding of the dynamics of recovery. The case studies examined the sources of economic distress and documented the recovery process. Selected methods of regional economic analyses (e.g. shift-share) were applied.

Findings: Based on the cross-sectional data, growth in manufacturing employment is the central aspect of economic recovery. Based on the cross-sectional regression analysis, high wage rates exert a negative influence on growth and recovery while the availability of local infrastructure facilities are of secondary importance. The major conclusions from the case studies are that industries are attracted to communities with a surplus of semi-skilled and skilled workers, low wages, and lack of union strength.

II-5. *Title:* Southern Growth Trends 1970-1976
Authors: E. Evan Brunson and Thomas D. Bever
Organization: Southern Growth Policies Board
Date: June 1977 *Pp.:* 55 *NTIS:* PB 279 473 *Price Code:* A03

Purpose: To identify growth issues for the South in the next decade.

Method: Analyzes historical growth trends in the South, including population trends and settlement patterns, changes in economic structure, energy production and consumption trends, population and income projections. These trends are extrapolated into the future.

The analysis of population trends is taken primarily from the U.S. Bureau of the Census.

Economic trends are based on studies by Lawrence K. Lynch from the University of Kentucky and William H. Miernyk from West Virginia University. Energy trends analysis comes primarily from Russell L. Howard and work done by the Oak Ridge National Laboratory. Other statistics originate from the Bureau of Economic Analysis and EDA reports. Several other papers from Southern research groups are also utilized.

Findings: Conflicts over economy, energy and the environment will be the major growth policy issues in the South. Southern population growth outstrips other areas and is a result of the out-migration from the Northeast and North Central regions to more plentiful Southern jobs. This migration was composed mainly of whites, although since 1970 there has been a net migration of blacks to the South.

Although population is growing slightly faster in Southern cities, in general there is balanced growth between the metropolitan and nonmetropolitan areas. Southern economic growth is best characterized in this decade as dispersed and decentralized, with many former losers in population and economic activity now gaining.

-6. *Title:* The Declining Northeast: Demographic and Economic Analyses
Author: Benjamin Chinitz, ed.
Organization: State University of New York (Binghamton)
Date: 1978

Published in: *The Decline of New York in the 1970s, NTIS:* PB 269 570, *Price Code:* A10

Purpose: This book records the proceedings of a conference held in Binghamton, New York, at which the facts, the diagnoses, and policy implications of the economic and fiscal circumstances of New York State and the Northeast region were presented and discussed.

Method: Seventeen experts in economics and public affairs, including Alan K. Campbell, Harold M. Hochman and Peter Bearse, emphasize the difficulties of adjusting to declining economic and human resources in New York State specifically, and the Northeast in general. Topics discussed range from the effect of population loss on education and housing to an examination of downward trends in regional employment and income.

Findings: Proposals to ease the region's economic problems during the transition period should center on selecting priorities in the adjustment of public services. With appropriate Federal aid, severe, across-the-board cutbacks in public services can be avoided in favor of a slow rate of growth in public services.

II-7. *Title:* Study of Clustering of Industries
Author: Stan Czamanski
Organization: Dalhousie University
Date: 1974 *Pp.:* 154 *NTIS:* PB 254 275 *Price Code:* A08

Purpose: To identify clusters of industries capable of generating multiplier effects when introduced into depressed regional economies.

Method: This volume describes the verification of hypotheses dealing with the role of agglomeration economies in industry location choice and the impacts on local economies of these choices. Sixteen clusters of industries and their characteristics are identified. The types of clusters examined are: heavy manufacturing, construction and light manufacturing, and service activities. An input-output table is used to derive intra-cluster multipliers. Several appendices deal with grouping of industries, size distribution of industries, linkages, linkages among industries, and interindustry multiplier effects.

The input-output table used was originally developed by P. J. Bourque, *et al.*, *The Washington Interindustry Study for 1963,* which was condensed by Czamanski. The Office of Business Economics Table, *Input-Output Structure of the U.S. Economy: 1963,* was also utilized.

Findings: The impact of a new activity upon a smaller region might be far more important than in a large, well developed economy. This finding contradicts the belief that multiplier effects are stronger in larger cities because larger economies have less leakages and hence, higher multipliers. This apparent incongruity occurs because several different types of multipliers follow the introduction of a new activity into a regional economy. There appear to be multipliers generated within the industry cluster itself as well as multipliers generated in the rest of the regional economy.

The largest intracluster multipliers were associated with manufacturing activities, while services showed much lower values. Regional multipliers are as a rule much lower than the intracluster multipliers.

II-8. *Title:* Development Patterns and Potentials of Selected Distressed Areas
Author: Henry L. Eskew
Organization: Administrative Sciences Corporation
Date: March 1974 *Pp.:* 26 *NTIS:* COM-75-10742 *Price Code:* A03

Purpose: To present evidence and insights to aid EDA in its allocation of program funds to individual areas.

Method: Two hypotheses are tested: 1) economic development patterns and potentials of counties are more closely tied to their parent regions (States) than to the national economy; and 2) intra-regional variations in development patterns and potential are the result of differences in industrial structures and real economic attributes. Tabular comparisons of summary statistical measures such as root-mean-square differences and zero-order correlation co-efficients are utilized. The research for this study was based on regression analysis of seventeen counties done for EDA by Arthur D. Little, Inc. (ADL). ADL also prepared expository discussions of four analytic methods used in regional economic studies: economic base, shift-share, comparative cost, and input-output analysis. This study builds on the ADL effort in two ways. First, although different data sources, definitions and methods were used, the same seventeen areas constituted the focal point for analysis. Second, the present study examined the feasibility of overcoming the limitations of shift-share analysis discussed in the ADL report. Data for the comparisons come primarily from the Bureau of the Census.

Findings: The developmental patterns and economic potential of counties are more affected by the State economy than by the national economy. Intraregional variations in development can be explained by differences in area characteristics and industry structures.

In allocating EDA funds, emphasis should be on the development potential of the individual States. Forecasts by EDA's Multi-Regional Input-Output Model could be used for this purpose. Attention should be paid to the county's industrial structure vis-a-vis the parent region (State) as well as the levels of per capita employment and school years completed relative to the State norm. Also, a search should be conducted to evaluate the effects of substituting regional for national trends in applications of shift-share analysis, that form of analysis being the most reliable for constructing indicators of development potential.

II-9. *Title:* Statistical Models of Sub-Regional and Regional Employment Change: A Feasibility Study
Authors: Henry L. Eskew and Thomas P. Frazier
Organization: Administrative Sciences Corporation
Date: February 1979 *Pp.:* 65 *NTIS:* COM-75-10608 *Price Code:* A04

Purpose: To examine employment change at the sub-regional and regional levels, in order to identify a set of quantitative measures that can be used as criteria for evaluating CETA investments.

Method: The study is confined geographically to the six-State Midwest Administrative Region. A regression analysis is conducted in two phases, the first focusing on individual counties, and the second on Bureau of Economic Analysis (BEA) trade areas. In both cases, the relationship between the employment change from 1967 and 1969 and a set of explanatory variables is formulated and tested. Some of the independent variables for 1967 include: mean-school years completed, property tax, general expenditures by local government, earnings per worker, new capital expenditures in manufacturing per worker, and population. Data are drawn from BEA County Business Patterns, the *County and City Data Book*, and the Census of Population.

Findings: Employment change is explained better in multi-county areas than at the individual county level. For individual counties of widely varying size (50,000 to 2.7 million), the larger jurisdictions tend to experience greater employment growth. However, within the 75,000 to 250,000 range, population is less important than new capital expenditures in explaining employment change. Capital expenditures were found to have a negative effect on employment (i.e., new capital tends to be labor-saving).

The analysis of BEA trade areas revealed one dominant explanatory variable: local government direct general expenditures (i.e., education, highways, public health and welfare).

Population and new capital expenditures in the case of counties and local government expenditures in the case of larger areas are recommended for use in EDA's decision making process. The detailed statistical results should provide useful reference data for specific planning and evaluation needs.

II-10. *Title:* The Regional Data Quarterly: A Compilation of Nine Economic Performance Indicators for New England, Mid-Atlantic, and Midwestern States
Organization: Council for Northeast Economic Action and Chase Econometrics
Date: April, 1978 *Pp.:* 89

For further information contact the Council for Northeast Economic Action, 100 Federal Street, 17th floor, Boston, Mass. 02110, or the EDA Office of Technical Assistance.

Purpose: This periodical provides data on the economic performance of the Northeast, Mid-Atlantic, and the Midwest on a regional as well as State-by-State basis. It also compares State and regional economic performance to national economic trends.

Method: Included is a general discussion of the national economy. For each of the eighteen

States and three regions examined, there is a quarterly data series on employment, housing, income, and consumption. In addition, the performance of each State and regional economy for the previous quarter is discussed.

Findings: There are no findings associated with this report.

II-11. *Title:* The Economic Impact on Local Areas of the Program of the Economic Development Administration
Author: Robert E. Graham, Jr. and Randolph Martin
Organization: University of South Carolina
Date: May 1977 *Pp.:* 101 *NTIS:* PB 268 229 *Price Code:* A06

Purpose: To assess the impact of Economic Development Administration programs on economic growth and development in economically lagging areas of the United States during the 1960's and 1970's.

Method: Comparisons are made between counties receiving and not receiving EDA assistance, with respect to changes in growth rates of personal income, per capita income, total employment, and unemployment rates. These comparisons are made both before and during aid periods. A series of regression models are used to isolate EDA's impact. These models take into account additional factors (other than EDA assistance) that might affect personal income and per capita income. A preliminary examination of the effect EDA assistance has had on migration is highlighted. Finally, several case studies of counties that received large amounts of EDA assistance (Klickitat County in Washington, Garrett County in Maryland, and Carteret County in North Carolina) are discussed. Most of the data are from three sources: 1) EDA, 2) Bureau of Economic Analysis, and 3) U.S. Census Bureau.

Findings: EDA assistance increased county income growth rates (aggregate and per capita). Aggregate income growth in EDA-aided counties accelerated and surpassed growth in non-aided counties. This same trend occurred in employment growth. The EDA-aided counties experienced a greater reduction in unemployment rates, although absolute improvement was disappointing and the level of unemployment still unacceptably large (5.6% in 1970). The sample size used to obtain migration data was too small to yield reliable results.

II-12. *Title:* Regional Labor Supply Response to Negative Income Tax Programs
Author: David H. Greenberg and James R. Hosek
Organization: Rand Corporation
Date: February 1976 *Pp.:* 139 *NTIS:* PB 254 311 *Price Code:* A07

Purpose: Analyzes the likely effects of alternative negative income tax programs (NITs), with particular emphasis on regional labor-supply responses. Also examines the effects of NITs on reducing poverty at the regional level.

Method: The study proceeds in two steps. First, First, an econometric model is built, based on regional labor-supply equations. Separate equations are estimated for working husbands and wives, and working members of the various races, in the various (census) regions. The equations are based on economic theory, incorporating both income and substitution effects in labor-supply responses.

Second, simulations of the effects on labor supply and other variables are made, after the introduction of four versions of possible NITs. The authors adopt a "policy substitution approach," assuming that the NITs will eliminate some or all of the existing welfare programs.

The study utilizes data from the Census Bureau, plus labor-supply estimates from a variety of other studies.

Findings: There are significant regional differences in labor-supply responses to a NIT. These differences are due to regional variation in labor-supply responsiveness to husband-wife wage-rate differentials; differences in labor-supply responsiveness among races (where racial composition varies among regions); various mixes of welfare programs (where the fraction of households participating in current programs differs regionally).

Under a typical scenario, the South, having the largest number of households participating in a NIT, would receive the largest subsidy (followed closely by participating households in the North Central regions). These regions would receive the most (relative) benefit in poverty-reduction.

In no case would labor hours supplied be reduced more than one percent because of a NIT in any region.

II–13. *Title:* Measuring the Regional Economic Impacts of the Federal Grant Programs
Author: Richard D. Gustely
Organization: Bureau of Economic Analysis, U.S. Department of Commerce
Date: June 1978 *Pp.:* 39
Draft copy available free from Economic Research Division, EDA, while supply lasts.

Purpose: Examines the regional economic impacts of Federal grant-in-aid programs and identifies the range of methodologies employed in related research. Also explores promising areas for future research.

Method: The regional effects of Federal grant-in-aid programs are classified into four categories: fiscal effects, microeconomic effects, macroeconomic effects, and interregional effects. No empirical comparisons are given. Methods for measuring grant impacts are discussed, including the use of descriptive statistics, input-output, and econometric models. The overall trends in Federal aid are given using data from the U.S. budget and the *Survey of Current Business*.

Findings: Federal grants have increased dramatically in the past decade. From 1970–1978, Federal grants increased 230% in absolute terms. As a result, some cities have become heavily dependent on that aid. The geographical distribution of this aid has shifted (to the Northeastern and North Central States), and the character of Federal aid has changed (to general-purpose and broad-based categories).

Open-ended matching grants are most likely to stimulate total spending and increase taxation. Behavioral models were found to be the superior methodology for measuring fiscal and microeconomic effects of Federal aid. Input-output models are the most sophisticated means to measure the macroeconomic and interregional impacts.

More consistency in grant impact analysis is needed, so that the results of different studies can be more easily compared and evaluated. Promising areas for future grant-impact research include modeling the effects of grants on the composition of governmental expenditures, modeling the indirect effects of grant programs on the capital, land and labor markets, determining the extent to which different types of aid programs impact on various sectors of the regional economy, and analyzing the geographical distribution of Federal aid.

II–14. *Title:* Financing the South's Economic Expansion
Author: Dr. Charles F. Haywood
Organization: University of Kentucky
Date: January, 1977
Published in: *The Future of the South's Economy, NTIS:* PB 268 469, *Price Code:* A11

Purpose: To evaluate the adequacy of capital sources to meet the long-term demands of Southern growth.

Method: Five crucial areas of concern for the Southern economy are discussed and analyzed. These areas are: (1) the long-term economic outlook; (2) the long-term outlook for capital requirements; (3) the long-term outlook for debt expansion; (4) the role of the banking system, and (5) evidence of capital availability. Selected data from the Federal Reserve Bank of Atlanta are used to document the analysis.

Findings: In long-term projections to 1990, the South is ranked first in future relative growth, in personal income, employment, population and per capita income. While data deficiencies preclude a reliable estimate for long-term capital requirements, a moderate forecast indicates a need for investment spending ranging from about $80 billion in 1976 to $250 billion in 1990. Debt is estimated to range from $60 billion in 1976 to $225 billion in 1990.

The South has benefited from large capital inflows from other regions and this trend may be expected to continue so long as the South provides relatively attractive returns on capital. With respect to energy, the South will continue to enjoy a comparative advantage.

II–15. *Title:* Documenting the "Decline" of the North
Authors: Carol L. Jusenius and Larry C. Ledebur
Organization: Economic Development Administration (Visiting Scholars)
Date: June 1978 *Pp.:* 21 *NTIS:* PB 80 131535 *Price Code:* A02

Purpose: Examines the hypothesis that the poor employment performance of the North (New England, Middle Atlantic and East North Central) is due to the migration of firms to the South.

Method: Investigates recent changes in the composition of business enterprises and the migration of these firms to, from, and within the Northern region. The migration debate is resolved by making intraregional and interregional comparisions as to the source of firm and employment losses. Comparisons are made of firm birth, death, and migration rates by industry within and between regions.

The study utilizes a file from Dun and Bradstreet containing data on nearly one million firms over a five-year period. This data base permitted "the examination of firms by location, industry and employment size, not only at a point in time, but over time."

Findings: Out-migration of employers is a relatively insignificant problem for the North. The primary source of firm and employment losses was the closure of firms, not their migration. However, the Middle Atlantic States have suffered from the migration of firms between States within the North.

II-16. *Title:* Federal and Regional Responses to the Economic Decline of the Northern Industrial Tier
Authors: Carol L. Jusenius and Larry C. Ledebur
Organization: Economic Development Administration (Visiting Scholars)
Date: March 1977 *Pp.:* 19 *NTIS:* PB 267 779 *Price Code:* A02

Purpose: To assess the relative well-being of regions, particularly the Northern Industrial Tier.

Method: Evidence is presented on indicators of economic development and distress for all 50 States, and a ranking of States is proposed. Federal policy issues which appear to be of great long-term importance to the Nation and the Northern Tier are discussed. Empirical data for this report come from three main sources: *Survey of Current Business,* Bureau of the Census reports and *Current Population Reports.* Augmenting these were various articles from the *National Journal* and *Wall Street Journal,* among other publications.

Findings: Three main propositions are developed. First, available data do not support the interpretation that the economic problems of one region are more serious than another. States within each region exhibit a significant range of variation in economic problems. Whereas unemployment is a serious problem in the North, the major problem for the South is poverty.

In view of this evidence, four issues need to be considered in formulating a national policy for regional economic development: the distributional impacts of Federal programs, establishment of overall distributional and development objectives, consolidation of Federal development assistance programs, and the use of distributional controls or incentives. Instead of fighting over Federal monies, regions should realize that their economies are interdependent, and as such, there should be cooperation between the States themselves.

II-17. *Title:* The Migration of Firms and Workers in Ohio, 1970-1975
Author: Carol L. Jusenius and Larry Ledebur
Organization: Academy for Contemporary Problems
Date: 1977 *Pp.:* 78

Available from: Publications Department, Academy for Contemporary Problems, 1501 Neil Avenue, Columbus Ohio, 43201. Include $1.50 and return address.

Purpose: To assess the underlying trends that have contributed to employment and firm losses in Ohio and other States in the East North Central region.

Method: The birth and closure rates of firms in Ohio are examined. The migration of both firms and workers is assessed. With respect to workers, origins and destinations, as well as socio-economic characteristics, are examined.

The data for birth, death, and migratory patterns of firms are derived from Dun and Bradstreet data files. The Social Security Continuous Work History Sample is the source of information for the migration patterns of Ohio workers.

Findings: Firm losses in Ohio (and the East North Central region in general) during the 1970's can be attributed primarily to a larger number of firm closings relative to the small number of new firm openings. The out-migration of firms has not been a significant cause of Ohio's economic problems. There were relatively few new branch firm "births." Manufacturing firm "death" rates exceeded manufacturing firm "birth" rates in every employment size category.

Unlike the 1965-1970 time span, the 1970-1975 time period witnessed a net out-migration of workers in Ohio. This trend is attributed more to a larger decrease in the in-migration of workers than to an increase in worker out-migration.

The most significant changes between the two time periods from net in- to net out-migration occurred among black workers and those workers in the lowest income categories.

II-18. *Title:* A Myth in the Making: The Southern Economic Challenge and Northern Economic Decline
Authors: C. L. Jusenius and L. C. Ledebur
Organization: Economic Development Administration (Visiting Scholars)
Date: November 1976 *Pp.:* 47 *NTIS:* PB 263 631 *Price Code:* A04

Purpose: To examine the comparative levels of economic development in the North and South.

Method: The study evaluates the comparative economic performance of the North and South in terms of: population, income, income distribution, poverty, personal wealth, employment, unemployment, and distributional impacts of fiscal policy. Both time-series and cross-sectional data from numerous Federal sources are used to document regional disparities.

Findings: There is no correlation between the decline of the North and recent rise in the economic vitality of the South. The problem of poverty remains more pervasive in the South, while per capita income remains higher in the North. The primary cause of declining employment in the North appears to be the result of the closing of existing firms. Conversely, the primary reason for increased employment in the South has been the expansion of existing firms. Lastly, while the North confronts serious economic problems, it retains a lead over the South in economic development in both aggregate and per capita terms. In fact, recent evidence would indicate that in 1975 the relative position of the South has declined. Even the relative improvement of the Southern States is a cyclical phenomenon which may not be sustained through the full recovery of the economy. Therefore, policy decisions based on evidence from the 1970-1975 period may be misconstrued.

Further, the claim that the Northern States would benefit from a reallocation of Federal program benefits is unsupported. The regional economies are highly interdependent. A carefully conceived development policy which mitigates economic distress in particular regions and harmonizes regional growth is essential.

II-19. *Title:* The Northern Tier and the Sunbelt: Conflict or Cooperation?
Authors: Carol L. Jusenius and Larry C. Ledebur
Organization: Ohio State and Denison Universities
Date: April 1977 *Pp.:* 6
Published in: *Challenge*, March-April, 1977

Purpose: To examine regional economic problems and to propose public prescriptions at both the Federal and regional level.

Method: The authors establish the existence of interregional rivalries, especially between the North and South, by reference to quotes by public officials and the existing policies of regional coalitions. Data on income, taxes, and population taken from selected Federal sources are introduced to document that economic disparities favor no particular region.

Findings: A higher priority within the Federal Government should be given to economic development assistance. Fiscal stimulation of the Northern economy would have a net positive result for the entire Nation. Further, the focus on interregional economic comparisons of Federal tax and expenditure patterns should be shifted and more attention paid to concrete issues. The study concludes by urging the formulation of a national development strategy which would address (1) distributional impacts of Federal programs, (2) establishment of distributional and development objectives, (3) consolidation of Federal development assistance programs, and (4) distributional controls or incentives.

II-20. *Title:* Where Have All the Firms Gone? An Analysis of the New England Economy
Author: Carol L. Jusenius and Larry C. Ledebur
Organization: Economic Development Administration (Visiting Scholars)
Date: September 1977 *Pp.:* 33 *NTIS:* PB 284 785 *Price Code:* A03

Purpose: To explain why employment in New England has grown more slowly than employment in the United States economy during the years 1969 to 1974. The study also examines what effect the shifting configuration of firms has had and is likely to have on the kinds of jobs which are available in the area.

Method: Presents descriptive, empirical information about recent changes in the configuration of firms in New England. Also examines the birth and death rates of firms during the period. Data are gathered for single-unit firms, and for both headquarters and branch locations of multi-unit firms, by industry type. Interregional and intraregional migration of firms is analyzed. For interregional flows, regions from which firms in-migrated or to which firms out-migrated are tallied and industry types summarized.

Most of the data are from a Dun and Bradstreet sample. These data provide information on the status and changing status of firms by such characteristics as industry class, numbers of employees, geographic locations, etc. Regional employment data from the U.S. Bureau of Labor Statistics and the U.S. Department of Commerce are also presented.

Findings: Relative to the U.S. economy, New England historically has specialized in two industries: Manufacturing, and Finance, Insurance and Real Estate. The slow growth rate of employment in New England during the years 1969 to 1974 cannot be attributed to an above-average death rate for firms in either of those industry types. Instead, the problem lies in a relatively low birth rate, especially for manufacturing firms (in contrast, the birth rate of firms in the Finance, Insurance and Real

Estate industry was quite high). Contrary to the belief of many, New England actually gained firms through net in-migration over the six-year period.

The configuration of multi-unit firms changed during the period. Firm headquarters tended to increase, and firm branches to decrease, in the New England area. From the combined effects of the relative decline in manufacturing and the relative increase in headquarters functions, a shift from blue-collar to white-collar employment occurred in New England.

II-21. *Title:* The Future of the South's Economy
Author: Herman Kahn
Organization: Hudson Institute
Date: December 1976 *Pp.:* 22

Published in: *The Future of the South's Economy, NTIS:* PB 268 459, *Price Code:* A11

Purpose: To assess the prospects for and determinants of economic growth in the South.

Method: A wide range of topics is covered in this speech given at the Southern Growth Policies Board conference. Comparisons are made between the South, the rest of the Nation and other nations, in various stages of development.

Findings: The South has grown about fifty percent faster than the rest of the country since 1950 in total economy. The South will continue to grow much faster than the Northeast. The crucial element is not resources but the character of the people. People in the South have a better appreciation for work than do their counterparts in the Northeast. The Northeast culture has traditionally been very favorable to growth in the past but is becoming increasingly anti-growth.

II-22. *Title:* Income Distribution in the South
Author: Madelyn M. Lockhart
Organization: University of Florida
Date: January 1977

Published in: *The Future of the South's Economy, NTIS:* PB 268 469, *Price Code:* A11

Purpose: To describe and project income distribution in the South. Also, to evaluate measures aimed at changing the distribution of income.

Method: After an analysis of concepts such as income and income distribution, the demographic aspects and projections of income, employment, and population are discussed. Data from Census reports and the *Survey of Current Business* are utilized.

Findings: The size of the income "pie" in the South has been increasing, both in absolute terms and relative to the Nation as a whole. However, the South still has a higher proportion of families below the defined poverty level, 16 percent compared to 12 percent nationally. Significant changes in the distribution of money income are not likely in the near future. Alternatives for increasing income equality include the negative income tax, a voucher system attached to a specific set of goods and services, and tax reform to eliminate highly regressive tax structures at the State and local level. The effects of increased educational opportunities are long run, and the evidence on its distributional impact is ambiguous.

II-23. *Title:* The Changing Structure of the Southern Economy
Author: William H. Miernyk
Organization: West Virginia University
Date: January 1977

Published in: *The Future of the South's Economy, NTIS:* PB 268 469, *Price Code:* A11

Purpose: To analyze the changing structure of the Southern economy between 1940 and 1975, and to determine the potential for continued Southern growth and development.

Method: A comparative analysis of the structure of the Southern economy between 1940 and 1975 is presented. Emphasis is placed on the relative distribution of employment and its relation to per capita income. The Clark-Fisher hypothesis is discussed and its application to the Southern economy is evaluated. The Clark-Fisher hypothesis postulates a functional relationship between an economic structure and per capita income. For example, a country with a large percentage of workers in the primary sector (agriculture, fishing) should have a lower per capita income than one with a greater percentage in the secondary (manufacturing, mining, construction) and tertiary (service industries) sectors. Selected data from the *Survey of Current Business* and private sources are used.

Findings: Major differences in the structure of employment existed between the South and the rest of the Nation in 1940. By 1975, however, most of the differences had disappeared. It is likely the South will continue to grow at a faster rate than the Nation as a whole. Employment in both the trades and services sectors can be expected to increase as should the per capita income of the region.

II-24. *Title:* Midwest State Profiles
Author: Northeast-Midwest Congressional Coalition
Organization: Northeast-Midwest Institute
Date: September 1978 *Pp.:* 57

For further information, contact the Northeast-Midwest Institute, 3588 House Annex No. 2, Washington, D.C. 20515

Purpose: This paper provides a quick reference source of relevant information about the economies of the Midwest States and explains how some of the activities of the Northeast-Midwest Congressional Coalition have affected those States.

Method: Provides detailed statistics on unemployment rates, employment change, income, business growth, population, etc., for each State in the Midwest as well as general comments by the researchers.

Employment data comes from the Bureau of Labor Statistics and the Bureau of the Census. Income data was obtained from the Department of Commerce, Bureau of Economic Analysis. The Current Population Report Series provided pertinent population data and data on Federal, State and local taxes and revenues came from the Bureau of the Census, series, with additional statistics published in *National Journal* also being used.

Business growth data sources were: *Annual Survey of Manufactures, Construction Review,* Bureau of the Census and from Peter M. Allaman and David L. Burch, "Components of Employment Change for States by Industry Group, 1970–1972." Additional data came from Northeast-Midwest Institute.

Findings: In the Midwest States, it appears that key economic growth indicators lag substantially behind the national average. This suggests that without major changes, the Midwest will have serious development problems, particularly in the critical manufacturing sectors. A bipartisan congressional coalition organized along regional lines would be useful in drawing support for Midwest growth.

II-25. *Title:* The Cause and Quality of Southern Growth
Author: Mancur Olson
Organization: University of Maryland
Date: January 1977

Published in: *The Future of the South's Economy, NTIS:* PB 268 469, *Price Code:* A11

Purpose: To examine reasons why the South remains a distinctive economic region of the country.

Method: The South has recently experienced exceptional rates of economic growth. Some of the reasons for this growth reside in fundamental differences between the South and the rest of the Nation. These differences are examined as are contrasts with several European nations in various stages of economic development.

Findings: The South has been relatively unaffected by the formation of organized interest groups such as labor unions, professional associations, farmers' organizations, lobbying groups, trade associations, and cartels. The effect of such groups on economic growth is predominantly negative. The South, without such groups, has been able thus far to grow more rapidly than the rest of the United States. This growth does not necessarily imply an improvement in personal welfare, however. Also, it is unlikely that the South's higher rate of growth will continue unabated.

II-26. *Title:* Working Paper on Rail Reorganization Economic Development Issues
Organization: RMG Associates, Inc.
Date: August 1975 *Pp.:* 33 *NTIS:* PB 256 685 *Price Code:* A03

Purpose: To review the regional impact of the U.S. Railway Association's (USRA) Final System Plan to restructure the bankrupt carriers in the Northeast and Midwest. Also highlights possible modifications to EDA's economic development strategies implied by these impacts.

Method: Economic development issues associated with the Final System Plan are identified on both a broad regional basis and on a smaller sub-regional basis. Economic impacts are developed for both of these perspectives by analyzing the Final System Plan and referring to a number of other studies. Suggested EDA initiatives in such areas as assistance in State rail planning grant and loan programs and research and evaluation initiatives are offered. An appendix presents the highlights of the Final System Plan.

Most of the analysis was based on preliminary studies done by USRA, as well as independent studies by public and private researchers.

Findings: The Final System Plan (FSP) would probably have a beneficial impact on economic development. It can provide more stability to bankrupt carriers through capital investment and reorganization. The loss of service through abandonments will not have a serious regional impact, but may have serious consequences for certain communities in terms of the loss of employment, income, tax base, and attractiveness for new industry development.

The FSP must have the flexibility for accommodating future changes in demand, especially future coal production. The major problem is a lack of contingency plans if traffic or market patterns shift significantly in the next 10–15 years.

EDA should investigate the impact of FSP on communities, especially where they have already made investments for development. The strength of EDA's concern should be a function of the strength of the relationship between changes in the rail service and the impact on these investments. EDA may also wish to increase Title III funds to impacted communities and should be sensitive to the consequences of rail reorganization on their grant and loan programs. EDA's assistance can have greater impact if addressed to the sub-regional or community level rather than the large region.

II-27. *Title:* Balanced Growth for the Northeast
Organization: New York State Senate
Date: December 1975 *Pp.:* 204 *NTIS:* PB 255 930 *Price Code:* A09

Purpose: To assess the economic problems and potential of the Northeast. To devise regional strategies for balanced growth for the Northeast.

Method: The study is a compilation of papers presented at a conference of legislative leaders on the future of the Northeast, December 11-13, 1975. Specific issues discussed included: energy resources, implications of economic maturity, government initiative and restraint, State fiscal difficulties, utility rate regulations, unemployment, demographic trends, and labor and capital markets. Several papers highlighted regional approaches to balanced growth planning (for example, the Southern Growth Policies Board, the Nation's first multi-purpose interstate agency, was discussed at length as an exemplary regional planning agency).

Findings: Given its high energy costs, heavy tax loads, and out-migration of industries and workers, the Northeast is at a serious competitive disadvantage. On the other hand, certain characteristics of the Northeast remain important assets. These assets include an experienced, skilled labor force, excellent public and private educational institutions, and strong, responsive local governments.

Interstate initiatives that include projection planning, econometric modeling, and investment planning are needed to address the Northeast's economic problems. Environmental concerns must be balanced with economic concerns. Various means to improve the investment atmosphere in the region must be devised by State and local governments.

Development planning will inherently conflict with politics. This can largely be attributed to the widely differing time horizons between the planner and the politician.

II-28. *Title:* The Northeast: Managing A Way Out—Legislative Actions for Survival in the Credit Markets
Author: Roger C. Thompson and James M. Howell
Organization: The Steering Committee of Legislative Leaders for Balanced Growth for the Northeast, and the Council for Northeast Economic Action.
Date: February 1977 *Pp.:* 158 *NTIS:* PB 270 118 *Price Code:* A08

Purpose: This volume contains the proceedings from a symposium on the fiscal problems and economic decline of the Northeast. The symposium was held in Boston, Massachusetts in February 1977.

Method: The symposium proceedings address two problems of the urban Northeast, namely the decline of growth in the private sector and the inability of the public sector to raise revenues to meet the increased demands for social services. Three papers feature a discussion of the Volkswagen experience in Pennsylvania. Conference participants include senior business leaders, academicians, and politicians. A large appendix contains a special study of State and local government experience in credit markets.

Findings: The Northeast has reached the stage of "economic maturity," i.e., the private sector appears no longer to be making a net contribution to the region's growth. Specifically, there is lagging capital spending, structural problems in labor markets, and a reluctance on the part of business to expand in the region.

The region has also reached the stage of "governmental maturity" where, with lagging private sector growth and growing public expenditures, governmental units have trouble staying solvent.

To reverse these problems, new private investment will be needed in the region and existing boundaries of government may have to be altered to be more functionally compatible with changing economic patterns.

II-29. *Title:* The Impact of Vocational and Technical Education on Manpower and Economic Development
Author: Francis T. Tuttle and Arch B. Alexander
Organization: State Department of Vocational and Technical Education, Stillwater, Oklahoma
Date: May 1971 *Pp.:* 48 *NTIS:* PB 256 316 *Price Code:* A03

Purpose: Highlights the role effective vocational and technical education can play in regional economic development. It also identifies major features of effective vocational-technical education programs.

Method: The "special schools" in Oklahoma's vocational-technical educational pogram are examined. Observations are made with respect to the function of the facilities in vocational-technical schools. The importance of an effective State and local vocational-technical management system is also discussed. Specific vocational-technical schools are cited as examples where applicable.

Findings: Effective vocational-technical education agencies provide flexible educational opportunities and facilities. Pooling of industrial training equipment and mobile vocational-technical facilities are two key means of providing this flexibility.

An effective vocational-technical management information system is needed to collect and organize the information required for decision making. The Management by Objective (MBO) system adopted by the Oklahoma State Department of Vocational and Technical Education is a good example of a successful management system.

Duplication of programs and projects on the Federal level and between Federal and State governments have hindered the training process and should be avoided.

II-30. *Title:* Regional Industrial Location Determinants and Their Application to Modeling
Author: Leonard F. Wheat
Organization: Economic Development Administration
Date: May 1979 *Pp.:* 50

Limited supply of copies available free from EDA Economic Research Division.

Purpose: To examine the regional determinants of industrial location. To apply these findings to regional econometric modeling.

Method: The effects on absolute and relative growth in manufacturing employment of specific locational factors such as markets, climate, labor, resources, and thresholds are evaluated via numerous simple, partial, and multiple regression analyses. The merits of alternative approaches to model design (factor, least-cost, and industry-mix/shift-share approaches) are weighed in light of implications from the study's findings on locational factors. Approaches to the design of a factor model are highlighted.

The paper was presented at the 1979 Northeast Regional Science Meetings, Amherst, Massachusetts, May 18–20, 1979.

Findings: Market considerations (supply-demand ratios) are the leading regional determinants of industrial location. Climate and labor (including wages, unionization and labor supply) rank second and third, respectively, as locational determinants.

The study's findings on industrial location determinants imply that models incorporating specific locational factors are better predictors than the least-cost models and trend models (which include the industry-mix and shift-share concepts). Least-cost models, for example, are unreliable since they do not include the two most important determinants of industrial location: markets and climate. The best approach to model design is one that combines a factor type model with sophisticated trend concepts.

II-31. *Title:* Executive Summary of the Atlantic Conference on Balanced Regional Growth, January 4–6, 1978, Racine, Wisconsin
Author: Linda Seagraves
Date: January 1978 *Pp.:* 59 *NTIS:* PB 299 333 *Price Code:* A04

Purpose: To summarize the proceedings of a January 1978 seminar of policymakers and economic development specialists from Western Europe, Canada, and the United States.

Findings: The paper has no findings but rather discusses the fiscal and financial incentives Western nations use to encourage balanced regional development. The report discusses regional incentive policy options used and tried by these nations, including infrastructure provision, state industry, disincentives, and incentives. An appendix entitled "Advantages and Disadvantages of Different Regional Incentive Types" analyzes capital grants, soft loans, national profits tax concessions, and accelerated depreciation allowances.

Note: Papers and proceedings of this conference were developed into *Balanced National Growth*, Lexington Books, 1979.

III. Rural

Most of the recent EDA research in this area examines and explains the current revitalized status of rural areas. The research is specific in attributing this revitalization to the decentralization of industry, technological improvements in transportation and communication, energy exploitation, mounting urban problems, and changing lifestyles and early retirements associated with rising income security. However, despite this general picture of vitality, poverty is still a major problem which exists apart from rural growth.

III-1. *Title:* A Preliminary Review of Current Practices and Trends in Rural Telecommunications Development and Recommendations for Future Development
Author: Samuel Carradine, *et al.*
Organization: The Booker T. Washington Foundation/Cablecommunications Resources Center
Date: August 1975 *Pp.:* 141 *NTIS:* PB 254 366 *Price Code:* A07

Purpose: To provide EDA with working knowledge regarding the future course of telecommunications research and development as related to rural economic development.

Method: Surveyed 18 "informed experts" in the field of rural telecommunications about its potential impact on rural development. The existing literature on telecommunications utilization is also reviewed.

Findings: Few, if any, telecommunications projects have focused specifically on rural areas in spite of the unique ability of telecommunications to serve such areas. The implementation of telecommunications technologies for rural areas should be evaluated on a regional basis. Regional consideration will impart economies of scale to telecommunications projects, helping defray the capital costs of both hardware and software.

The private sector is not at present motivated to apply telecommunications technology in rural areas. The proposed Telecommunications Technology Act of 1975 (H.R.9281) could greatly facilitate the establishment of an environment conducive to rural telecommunications development. In addition, the FCC should reconsider its regulations insofar as they impact upon rural television delivery alternatives. Fewer regulatory impediments would allow rural areas expanded use of technologies that can greatly lower the cost of rural telecommunications systems.

EDA should coordinate and maximize government involvement in telecommunications/rural development. This activity could take the form of increased information exchange, interagency project efforts, and research on the economic impacts of various telecommunications delivery systems.

III-2. *Title:* Rural Economic Development: A Concept Paper
Authors: J. Chalmers, M. Greenwood, M. York
Organization: Mountain West Research, Inc.
Date: August 30, 1977 *Pp.:* 16 *NTIS:* PB 275 785 *Price Code:* A03

Purpose: To describe and analyze the reversal of net migration flows between urban and rural areas.

Method: Outlines the reasons behind the rapid growth in population and employment in nonmetropolitan areas. Described are the barriers to economic development and the proper policy initiatives to deal with these economic development problems.

Findings: The notion that rural economic development is a one-dimensional concept associated with agriculture is clearly outmoded. Population dispersal has been brought about by rising urban incomes, changing lifestyles, technological change in transportation and communication, and the high social costs of heavy population concentration.

Targeted governmental intervention in the process of growth and development is required to manage the complexity and diversity of rural problems. Initiatives should be targeted at community development, vocational training and private sector job creation.

III-3. *Title:* Policies for Nonmetropolitan Areas
Author: Niles Hansen
Organization: University of Texas (Austin)
Date: November 1978 *Pp.:* 25 *NTIS:* PB 298 322 *Price Code:* A03

Purpose: To develop a way of viewing the national and regional spatial dynamics of the United States that takes into account the growth of nonmetropolitan areas.

Method: The growth of nonmetropolitan areas in employment and population is documented. This growth points to an inadequacy of conventional spatially dynamic models that treat SMSAs, States and other spatial units. Causes of these growth trends are investigated as well as the consequential inadequacy of Federal policies for development.

Statistical evidence for growth trends in nonmetropolitan areas is provided by the Population Studies Group, U.S. Department of Agriculture, as well as data from the Bureau of Labor Statistics and Employment Service. In addition, many independent studies of growth patterns are cited.

Findings: Streamlining and harmonizing intergovernmental activities could alleviate uneven growth problems by giving States a more positive role in planning. Nonmetropolitan counties have experienced growth in recent years because of expansion of urban areas from SMSAs, recreation, tourism, retirement, and decentralization of manufacturing and services. Despite this growth, many of these areas still have high levels of underemployment and poverty. Because of the mixed nature of nonmetropolitan development, there is frequent overlapping and conflict in Federal programs, as in the conflict between development advocates and environmentalists. More research into the role of regional science and its potential in solving these problems is needed.

III-4. *Title:* Issues in the Economic Development of Nonmetropolitan United States
Author: Larry C. Ledebur
Organization: Economic Development Administration (Visiting Scholar)
Date: January 1977 *Pp.:* 28 *NTIS:* PB 267 313 *Price Code:* A03

Purpose: To explore the issues and goals of regional economic development and the causal forces behind the economic decline of rural areas.

Method: Delineates the primary factors behind rural decline, namely: technology, shifting patterns of demand, and changes in residential preferences. The incidence and severity of rural poverty are examined by comparing the incidence of low income in metropolitan and nonmetropolitan areas, by race. Statistics on the percent of occupied housing units in rural areas without complete plumbing are presented. Statistics on median family income and median school years completed in metro and nonmetro counties, by race, are also provided.

The key issues in rural economic development are outlined. These issues include the role of the market, place prosperity versus people prosperity, equity versus efficiency, and the controversy over whether program efforts should be focused on regions of greatest poverty or those with the greatest potential for economic survival.

Next, the goals of economic development and the need to measure development on a multifaceted scale are discussed. The concept of "balanced growth," important in distinguishing between "growth" and "development," is also elucidated.

Findings: By almost any measure, the incidence and severity of poverty in rural areas is greater and more chronic than in the early sixties. At the end of the sixties, 11 percent of the housing of rural whites and 55 percent of the housing of rural blacks was substandard. Average family income is lower in rural areas for both whites and blacks. However, the economy is changing structurally away from the conditions which produced this rural underdevelopment. Urban areas have begun to lose population through out-migration. There also appears to be a redistribution of employment opportunities from urban to rural areas.

The context of rural economic development appears to be changing. The revival of population growth in rural areas will force a rethinking of both rural and urban economic development. Current development policies may be designed more for problems as they were, rather than as they are or will be in the future.

III-5. *Title:* The Changing Demographic and Economic Structure of Nonmetropolitan Areas in the 1970's
Author: Kevin F. McCarthy and Peter A. Morrison
Organization: Rand Corporation
Date: December 1977 *Pp.:* 75 *NTIS:* PB 297 540 *Price Code:* A04

Purpose: To assess recent demographic trends and the economic consequences of such trends in the nonmetropolitan sector in the U.S. To differentiate changing demographic patterns and the influences affecting these patterns in the nonmetropolitan sector.

Method: A descriptive overview of the nonmetropolitan sector's changing demographic trends is highlighted. With the use of county-level data files, crude statistical "barometers" are devised to analyze the impact of specific population growth-inducing activities in the nonmetropolitan sector (for example, recreation, retirement, energy extraction). Nonmetropolitan demographic trends in the 1960's are compared with 1970's trends via a multivariate analysis at the county level. The U.S. Bureau of the Census, the Economic Research Service, the Social Security Continuous Work History Sample, and the Bureau of Economic Analysis are some of the data sources.

Findings: Three recent trends contribute to increased nonmetropolitan population growth: increasing accessibility to the national metropolitan economy, new industrial activity in the nonmetropolitan sector, and a changing American life-style.

The post-1970 nonmetropolitan population growth trend differs from the nonmetropolitan growth during the 1960's. Some of the most rapid growth in the 1970's occurred in the least urbanized nonmetropolitan counties.

Retirement and recreation have increased in importance as sources of population growth in the nonmetropolitan sector. Economic factors may no longer provide the dominant impetus to nonmetropolitan growth.

III-6. Demographic Structure and Implications of Recent Nonmetropolitan Growth: Synthesis of Previous Research
Author: Peter A. Morrison
Organization: Rand Corporation
Date: September 1976 *Pp.:* 32 *NTIS:* PB 298 374 *Price Code:* A03

Purpose: Reviews the demographic structure of population changes occurring in nonmetropolitan areas and the variations in these changes in different parts of the country. The underlying causes of these changes are examined.

Method: Migration and the urban-rural distinction are defined. Demographic trends and implications of recent nonmetropolitan growth are highlighted from existing research literature, much of which is not yet in published form, and current demographic data from the U.S. Bureau of the Census. The paper is a base study for a larger, empirical project.

Findings: Since the early 1970's, there has been a demographic revival in most nonmetropolitan counties in the United States (and a reduction in population growth in the metropolitan areas). "As in earlier decades, the nonmetropolitan sector continues, on balance, to gain less educated and lower status workers and to lose blacks and persons with any college education. Unlike before, the nonmetropolitan sector is now gaining whites and people from almost all ages." Earlier retirements, greater financial security, more emphasis on recreation, and exploitation of newly valuable energy resources (coal and oil, for example) have contributed to increasing the accessibility of nonmetropolitan areas.

III-7. *Title:* Arkansas Basin Chloride Control Project: A Critical Evaluation of Regional Effects
Author: Kent W. Olson and Alexander B. Holmes
Organization: Oklahoma State University
Date: December 15, 1978 *Pp.:* 125 *NTIS:* PB 297 498 *Price Code:* A06

Purpose: To assess the regional economic benefits and costs of the Arkansas River Basin Chloride Project, a project designed to alleviate a major saline pollution problem.

Method: A Corps of Engineers' study gives estimates of national benefits and costs of the chloride-control project. These estimates are used as a starting point for this study and adjusted to apply to the region. The Corps study covered impacts on recreation and flood control, water quality for agriculture, and economic effects. Original estimates are developed for the regional impacts of project construction expenditures and improved water quality for recreation, water supply and other uses. Individuals and groups residing in west central and northwestern Oklahoma are singled out for detailed study.

Models of regional income determination were not used nor were original data collected. The study utilizes cost-benefit and regional impact analyses to process data from a variety of secondary sources.

Findings: The chloride-control project would have a positive economic impact on the region, providing benefits in excess of costs of

$102-$107 million (present value, discounted at 10%, maximum 50 years). On this basis, fears by residents that the project would merely exploit regional resources for the benefit of downstream dwellers should be allayed. The study recognizes that all benefits and costs are not economic in nature, that social and environmental effects must be counted. These aspects are not investigated in depth, however.

III-8. *Title:* Industrial Invasion of Nonmetropolitan America
Authors: Gene F. Summers, Sharon Evans, Jon Minkoff, and Frank Clemente
Organization: University of Wisconsin (Madison)
Date: August 31, 1974 *Pp.:* 312 *NTIS:* PB 254 183 *Price Code:* A14

Purpose: To assess the effectiveness of rural industrial development in stimulating rural development.

Method: Draws upon case study documents for research results about the impact of rural industrial development on: a) the population; b) the private sector; c) the public sector; and d) the quality of life. The 178 case studies came predominantly from the Midwest and South, involving many types and sizes of industrial plants. Using inductive analysis, generalizations are made and evaluated in light of policy goals.

Findings: Rural industrial development does not seem to solve the rural poverty problem. Most new jobs do not go to local unemployed, under-employed, minorities, and marginally employable persons near or below the poverty line. Only low-skilled, low-wage industries are likely to employ the disadvantaged. Population growth does occur, however, as industrial development increases.

When a local subsidy is not offered to the plant and the workers are hired locally, the local government may experience a net increase in its fiscal resource base. In a majority of plant locations, however, the host community experiences growth, often increasing related service costs.

Development policy should encourage low-skilled, low-wage industries to locate in communities with a surplus of low-skilled labor. Development training programs to upgrade the skills of the local population should be established and anti-discrimination laws should be enforced.

III-9. *Title:* Urban Growth in the Nonmetropolitan South
Author: Leonard F. Wheat
Organization: Economic Development Administration
Date: 1976 *Pp.:* 171

Published by Lexington Books, D.C. Heath & Co.

Purpose: To identify and determine the relative importance of factors that discriminate between—and affect the growth of—fast-growing and slow-growing nonmetropolitan cities of 5,000 to 50,000 population.

Method: Uses cross-sectional correlation-regression analysis and supplementary statistical techniques applied to four samples of cities. The principal sample consists of 116 cities above 10,000 in population in thirteen Southern States—each State's fastest one-third and slowest one-third in 1960-70 population growth rate. A special analysis compares growth rates for geographically stratified groups of cities—330 cities in all—in five population intervals.

Findings: The findings support 16 of 23 hypotheses tested. Among the factors found significantly related to growth, air service looks strongest. Unemployment, prior growth, colleges, highways, property taxes, wages, existing manufacturing, metropolitan area proximity, and racial mix round out a list of the ten most important factors. Some factors are significant only in the Southeast or the Southwest. Most of these one-region situations result from the relatively labor-intensive structure of Southeastern manufacturing, which contrasts with a capital-intensive structure found in the Southwest. Not all of the significant relationships are causal; some factors, such as prior growth, are good indicators because they reflect others that may not be directly measurable. When incorporated in two city scoring formulas, the sixteen significant factors correctly classify (as fast or slow) 56 of 58 Southern cities and 56 of 58 Southwestern cities.

IV. Fiscal

EDA research in this area has concentrated on the fiscal distress currently being experienced in several urban areas. Of particular concern in the literature has been the interaction of Federal and local governments in the handling of the fiscal problems of cities. Solutions to the problems vary, but among the Federal actions suggested by researchers are revisions of tax laws, infrastructure maintenance and capital investments.

IV-1. *Title:* Federal Policy and the Fiscal Outlook for Cities
Author: Roy Bahl
Organization: Metropolitan Studies Program, the Maxwell School, Syracuse University
Date: June 15, 1978 *Pp.:* 36

Draft copy available free from Economic Research Division, EDA, while supply lasts.

Purpose: To assess the fiscal outlook for cities in light of their experiences in the 1960's, the urban crisis of 1975, and subsequent Federal and local government fiscal responses (through 1978). In addition, a section of the paper establishes principles for appropriate Federal urban policy.

Method: Traces the causes of the urban fiscal problems of 1975 to the recession-inflation of the late 1960's and early 1970's and the growth in public employment and compensation. He then offers reasons why central cities have performed above expectations since 1975: national recovery, direct Federal assistance, and service-level cutbacks. Projections on the future of American cities are provided.

Data are drawn from County Business Patterns and a number of books and papers, including Roy Bahl, *et al,* "The Outlook for City Fiscal Performance in Declining Regions," in *The Fiscal Outlook for Cities: Implications of a National Urban Policy.*

Findings: Cities in declining regions will be beset by problems, not the least of which is the prospect of reductions in Federal assistance. Four critical issues will influence the outlook for cities: (1) the priority given to targeting, (2) the place for revitalization in the national urban policy, (3) the amount of control placed in local hands, and (4) the financial generosity of the Federal Government. Irrespective of the developing urban policy, however, the fiscal outlook for cities will remain tied to national economic performance.

Federal policy should recognize the need for public-sector retrenchment. Federal policy should compensate for and reinforce existing trends, revitalize central city service sectors, and require States to formulate an urban policy.

IV-2. *Title:* The Fiscal Implications of Social Welfare Programs: Can They Help the Cities?
Author: Alan Fechter
Organization: The Urban Institute
Date: June 8, 1978 *Pp.:* 27

Draft copy available free from Economic Research Division, EDA, while supply lasts.

Purpose: This seminar paper surveys the objectives, goals, and impacts of the social insurance and social welfare programs in U.S. cities. It examines the fiscal implications for the cities of existing programs and current welfare-reform proposals.

Method: In assessing the impacts and objectives of the welfare programs, the author distinguishes between social-insurance and public-aid programs. The effectiveness of these programs is assessed in terms of reductions in the size of the poverty population. The four welfare-reform proposals examined are H.R. 9030 (the Carter Administration's Program for Better Jobs and Income), a revised version of H.R. 9030 (reported out by the Special House Subcommittee on Welfare Reform), H.R. 10711 (the Ullman bill), and S. 2777 (the Baker-Bellmon bill). Much of the relevant data is obtained from the Congressional Budget Office, the U.S. Bureau of the Census, and the Rand Corporation.

Findings: The welfare programs have worked reasonably well. For the year 1975, social-insurance and public-aid benefits reduced the number of families that would have been classified as poor (in the absence of these programs) by 12.4 million, or approximately 65%. The benefits were concentrated in single-parent families with children and families with disabled heads. The South did not benefit as much as the non-South. Current welfare-reform proposals, "while providing for valuable improvements in the form of a more equitable distribution of benefits and better incentives with regard to work behavior and family stability, do not offer much in the way of potential fiscal relief to cities in the form of reduced expenditure burdens for public assistance programs. Fiscal relief for cities will have to be generated through other programs."

IV-3. *Title:* Fiscal Impacts of Economic Activity Generated by Economic Development Grants: A Discussion of Possible Research Methodologies and a Review of the Literature
Author: Kenneth V. Greene
Organization: State University of New York at Binghamton
Date: October 1976 *Pp.:* 35 *NTIS:* PB 269 910 *Price Code:* A03

Purpose: To survey the literature relating to the fiscal impact of economic development grants. Also examines alternative research methodologies for assessing fiscal impact.

Method: The author evaluates and critiques fifty studies dealing with the fiscal impact on various communities of EDA grants. Selected data from these studies are provided. A bibliography is included.

Findings: Previous cost-revenue analyses have only limited relevance to serious analysis of the fiscal effects of EDA projects. Some of the problems of these studies include: failure to put costs and benefits in terms of present values; failure to provide a proper time frame; and the failure to note the economies of scale brought about by new residents. Most studies have also ignored secondary effects. A serious data-acquisition problem exists concerning the public-finance effects of EDA development grants. Several alternative methods are suggested for estimating the impact of the grants.

IV-4. *Title:* The Federal Response to the Fiscal Crisis in American Cities
Author: William Henderson
Organization: University of Missouri, Kansas City
Date: July 1978 *Pp.:* 62

Draft copy available free from Economic Research Division, EDA.

Purpose: To present an executive summary of the proceedings of a seminar on the Federal role in the fiscal crisis of American cities. The seminar was held in Washington, D.C., on June 15-16, 1978.

Method: Topics included a recent history of the changing fortunes of the cities, recent responses to the problems of the cities (including countercyclical revenue sharing and public works programs, block grants and public service programs), and new directions for the Federal role (such as development banking and financial incentives for depressed communities). The seminar was attended by sixty representatives from the Federal Government, groups representing State and city governments, universities, and private research agencies and consulting firms.

Findings: The proposed creation of a National Development Bank (NDB) is a major feature of the Administration's urban policy but the full effects of the NDB on depressed areas are not known. To protect the viability of such a program, loans are usually not made to high-risk ventures, whereas such ventures could help distressed areas. Loans or grants to attract firms to specific sites may merely induce them to move from other areas, and the move may harm the original area. Low-interest loans or grants to encourage site-specific investment may not be sound on efficiency grounds and may create a bias towards capital-intensive production processes. This may work against job creation in the cities that have large numbers of unskilled, unemployed persons.

An increased reliance on tax credits is advocated both to increase the investment component of aggregate demand in recessions (a short-run goal), and to increase productivity (a long-run goal). If not specifically targeted, however, tax credits to encourage capital investment may actually accelerate movements from cities to suburbs, further decentralizing economical activity from central cities.

IV-5. *Title:* The Future of the South's Economy
Author: Elliot L. Richardson
Organization: U.S. Department of Commerce
Date: December 1976

Published in: *The Future of the South's Economy, NTIS:* PB 268 469, *Price Code:* All

Purpose: To discuss (and support) proposed changes in allocation formulas for the distribution of Federal funds.

Method: An historical perspective on regional trends (the South's progress and the North's decline) is provided. The Federal Government's assistance to the South during President Roosevelt's administration is highlighted. The South's own stake in the North's current economic troubles is reviewed.

This speech was made before the conference on the Future of the South's Economy, sponsored by the Southern Growth Policies Board.

Findings: Federal assistance during the Roosevelt administration played an integral part in spurring growth in the South. The South's economic problems at that time were the Nation's problems.

A reversal in regional economic trends has since taken place. The South is prospering. The North is encountering an economic decline. Today, the North's problems are felt nationwide. Increased Federal assistance to the Northeastern region is, thus, in the interest of the Nation as a whole.

V. Development Planning

Because planning is so basic to the development process, it is of immediate interest to development agencies at all levels of government, and the subject has motivated a substantial volume of EDA research.

Perhaps the most persistently mentioned conclusions of EDA development planning research reports are that: (1) there is a need for increased and more broadly-based planning at all levels of government, and (2) there should be increased coordination among planning and development agencies. A third frequently mentioned conclusion is that there is a need for a more active policy of information dissemination in the planning field.

V-1. *Title:* The Purposes of Balanced Growth
Author: William Alonso
Organization: Harvard University
Date: January 1978 *Pp.:* 45 *NTIS:* PB 282 481 *Price Code:* A03

Purpose: To assess issues involved in a policy of balanced national development. These include territorial issues, policy objectives and conflicts, and important current changes in the population and the economy.

Method: Present approaches to balanced growth are discussed. Next, the nature and the purposes of balanced growth are defined. The five principal purposes of balanced growth discussed are: prosperity, equity, quality of life, environmental integrity and national security. Finally, the policy process for balanced growth is reviewed.

Findings: The present practice of formulating growth policies to achieve particular population distributions and growth rates for their own sake is misleading. Statistical descriptions of size, growth or decline may be symptoms of important problems. In devising policies for balanced growth, however, socially desired conditions for real people must be considered, rather than focusing on statistics themselves.

Balanced growth policy is aimed at reconciling various partially conflicting social purposes and the interests of various groups and cannot be achieved solely by technical information or by political decisions at the national level. The concept of a master plan for achieving balanced growth is fallacious since a complex political process is involved, with territorially defined institutions playing a large role.

Government actions have an implicit effect on balanced growth and should be reconciled with it. Much research is needed in this area.

As most balanced growth issues proceed slowly, they are usually postponed or neglected in favor of more urgent issues. But, what looks like a slow process from one level of government's perspective may be sharply felt in another level. Hence, participation from all levels of government can keep attention focused on issues of balanced growth.

V-2. *Title:* State Departments of Community and Economic Development: Frameworks for Coordinating Implementation
Authors: W.E. Bivens and Joseph S. Marinich
Organization: Council of State Community Affairs Agencies (COSCAA)
Date: June 1978 *Pp.:* 74 *NTIS:* PB 297 602 *Price Code:* A04

Purpose: To explore the structure, goals and performance of State departments of community and economic development (DCEDs).

Method: Eighteen States place community and economic development services in a single executive agency. Six of these agencies (Colorado, Delaware, Maryland, Ohio, Oklahoma, and Tennessee) are analytically profiled in this report. These departments (States) were chosen to provide geographic, demographic, and organizational diversity, and a balance between COSCAA member and non-member agencies.

The study examines each of the State DCEDs in five areas: structure, functions, coordination devices, philosophy, and results, and provides a brief history and summary of recent developments.

The information for the study's preparation was collected from secondary source materials (such as department annual reports), from a mail questionnaire survey, and from both telephone and face-to-face interviews with State personnel.

Findings: Consolidated departments of community and economic development afford an opportunity to institutionalize the coordination of community and economic development functions at the State level. DCEDs can avoid the rigidities of Federal programs (which are structured to administer national programs with national standards), as well as fragmented State programs (which are independent and often self-contained). DCEDs seem to improve responsiveness to local governmental units, the private sector, and community groups, by providing a single organizational structure with an emphasis on coordination.

V-3. *Title:* Human Resource and Regional Economic Development
Author: Paul V. Braden, ed.
Organization: Economic Development Administration
Date: October 1977 *Pp.:* 416

Available free from Economic Research Division, EDA, while supply lasts.

Purpose: To examine the interface between job-creating economic development policies and skill-increasing human resource development policies.

Method: There are three major sections within this book. Part one examines the setting within which economic and human resource development occurs. Part two examines the organization and implementation of human-resource and regional economic development programs. Part Three is concerned with human resource information systems and the establishment of an interface between information systems and regional economic development policy.

Most of the articles represent EDA-supported or in-house research. Some of the authors and articles are: Larry C. Ledebur, "Regional Economic Development and Human Resource Requirements," Richard E. Winnie, "Outcome Measurement of State Economic Development Programs," and Paul V. Braden, "Human Resource Information Systems for Regional Economic Development."

Findings: Improved coordination between economic development and human-resource development policies is necessary to assure employability of new labor force entrants. An increased level of collaboration among key people, in both public and private sectors, at all levels of decision-making, planning, and implementation is required to improve the development process. This collaboration can result in the recognition of mutual benefits for all.

V-4. *Title:* Planning for the Interorganizational Networking of a State Economic Development Council
Author: Robert E. Collier
Organization: Georgia Institute of Technology
Date: December 1977 *Pp.:* 152 *NTIS:* PB 298 352 *Price Code:* A08

Purpose: To assess how successful the Economic Development Council of the State of Georgia was in organizing individuals, agencies, and organizations to formulate and implement comprehensive economic development programs.

Method: Provides an overview of the organizational elements of the council and the relationships among member organizations. A data profile was developed for each organization to gauge its scope, type, and intensity of participation. Communication networks were identified by asking each organizational administrator what organizations he communicates with, together with the frequency of such communication.

Findings: The council members lack a comprehensive approach to economic development. Member organizations tend to operate in a narrow range of economic development sectors, and seldom evaluate interorganizational program impacts on economic growth.

To be fully effective, the "council mechanism" requires that additional interorganizational communications research be made available. The author advocates the use of participatory exchanges to improve the interaction among council member organizations.

V-5. *Title:* Capability of Transportation and Distribution Systems To Respond to Regional Growth
Author: James A. Constantin
Organization: University of Oklahoma
Date: October 1976 *Pp.:* 46 *NTIS:* PB 298 129 *Price Code:* A03

Purpose: To identify the role of the transportation and distribution system in regional economic growth. Also examines the environmental implications of transportation and distribution.

Method: The role of transportation and distribution systems in regional economic growth are reviewed in light of four pending changes: (1) capital shortages (2) fuel shortages (3) interregional shifts in population, income, and manufacturing employment; and (4) intraregional growth (population, industrial, and market for industrial goods growth) of small towns. The systems' ability to adapt to, as well as manage, these changes is discussed. The primary source of information is current periodical literature, such as the *Transportation Journal* and *Business Week*.

Findings: The transportation and distribution systems "can be a powerful force in economic development strategy coping with and managing change." The transportation and distribution resources can be strategically adapted to lessen the negative impact of the pending changes. They can effectively stimulate regional economic growth. In addition, these resources can be instrumental in reducing demands on capital and fuel resources via more effective use of transport capacity. All economic development planning should include consideration of transportation and distribution resources.

V-6. *Title:* The Functional Concept of Resources for Economic Development Purposes: A Framework for Analysis of Resource Use and Development
Author: James A. Constantin
Organization: The University of Oklahoma
Date: October 1975 *Pp.:* 84 *NTIS:* PB 259 128 *Price Code:* A05

Purpose: To create a planning framework for resource use and development that integrates A. H. Maslow's hierarchy of human needs and a systems approach to planning.

Method: The study is organized by the topics of resources, motivation, and planning. The functional theory of resources is defined and related to human wants. Attention is given to the economic, social, political, and technological aspects of resource appraisal (value), with the dynamic rather than static aspects of resources emphasized.

Maslow's theory of human motivation is then presented. This theory considers the physiological, safety, love, esteem, and self-actualization needs of individuals. The subject of planning and control, including strategic planning, managerial and operational control, and the overlap of these planning elements is also explored. Three continua of public-private investment roles in resource use and development are considered, including the symbiotic relationship between government and business, the planning period for public investment, and the social vs. private goals of investment.

Finally, a framework for resource use and development is discussed, emphasizing people-oriented factors in the framework. These factors include cultural considerations and human resistances to change.

Findings: Integration of the concepts of the functional use of resources, human motivation, and planning, together with views of the roles of the public and private sectors, provides a framework for resource use and development. This framework is useful in developing strategic planning programs (which jointly consider national policy goals, development agency policy goals, resource availability, and human motivation), and the development of methods to achieve managerial and operational control of these programs (evaluation, implementation, and control).

V-7. *Title:* The Development of a Subnational Economic Development Policy
Author: Economic Development Administration
Organization: U.S. Department of Commerce
Date: September 1977 *Pp.:* 72 *NTIS:* PB 298 094 *Price Code:* A04

Purpose: To make a comprehensive subnational economic development policy statement for EDA.

Method: Supplies a conceptual framework for organizing subnational economic development problems, identifies problems requiring public and Federal intervention and reviews existing Federal programs. Components for a coordinated, comprehensive Federal policy to achieve balanced and equitable subnational and national economic growth and development are established. EDA's five policy initiatives are described and analyzed. Data sources are the *Monthly Labor Review, 1970 Census of Population,* and the Brookings Institution/HUD report on the Community Block Grant program.

Findings: Structural subnational economic dislocation results from differential rates of capital and labor mobility between specific places. Such dislocations prevent the American economy from attaining full employment without high inflation. Therefore, subnational economic development is needed to reduce economic disparities in employment and other economic indicators between regions. Narrowing such disparities is hindered by the inadaptability of capital and labor to other uses, the difficulties of some localities in retaining and attracting economic activity, and the time lags involved in capital and labor adjustment.

To reduce the disparities of the adjustment process requires planned, coordinated use of public resources to attract private investment and create long-term employment. EDA's mandate is the promotion of subnational economic development through five policy initiatives: (1) provision of planning and technical assistance to State and local government and regional organizations, (2) the targeting of aid to central cities, metropolitan areas, urban neighborhoods, rural areas and States, (3) coordinated use of programs such as Title IX with other agency tools such as technical assistance, (4) establishment of countercyclical public works to stimulate construction sectors in creation of public facilities, and (5) the funding of research to improve the state-of-the-art of economic development and the dissemination of such information.

V-8. *Title:* Geocoding Data for Display and Policy Analysis: Volume I—The Potential of the ACCESS Process re Energy, Environment and the Economy
Author: William R. Ewald, Jr.
Organization: University of California, Santa Barbara
Date: 1977 *Pp.:* 71 *NTIS:* PB 273 031 *Price Code:* A05

Purpose: To present the ACCESS Project, assess how readily this process could be explained to potential users, and explore how the process might be applied by EDA.

Method: In this first of two reports, the ACCESS (Alternate Comprehensive Community Environmental Study System) Project is described. ACCESS is viewed as a national prototype study to determine the usefulness to policy makers of providing regional data on energy, the environment and the economy. The project's chief tool is interactive, graphic display of physical, social and economic data, "geocoded" (organized or referenced) to geographical locations.

A number of field interviews and conferences, involving local government officials, university members, and computer persons, were conducted to find out if regional policy-makers understand this process and will find it useful. A national conference of potential users was also organized.

Findings: Representing data in regional geocoded-form would be understood and accepted by potential users, provided it "really works." But since the ACCESS Project is only in the developmental stage, its usefulness is unproven. Further, to collect, encode, store, retrieve, combine and display the geocoded data would require that standard conventions be established, so that computers can be used.

No region was identified that was prepared to be the test site for the national exploration of the ACCESS process. Further, it appears that the national "market" for ACCESS in the next five to ten years would not be more than 100 multi-state, State, or COG multi-county regions. Because of this small number, mini-computer companies may be more interested in this market than the large firms. Finally, policy-makers do not want more data—they are already suffering from a "data overload" that many perceive will be exacerbated by ACCESS.

V-9. *Title:* Geocoding Data for Display and Policy Analysis: Volume II—Technology from the User Perspective
Author: William R. Ewald, Jr.
Organization: University of California, Santa Barbara
Date: 1977 *Pp.:* 163 *NTIS:* PB 273 032 *Price Code:* A08

Purpose: To present the proceedings from a conference held in Santa Barbara, California on May 8-10, 1977. The conference was organized to discuss and analyze the ACCESS (Alternate Comprehensive Community Environmental Study System) Project, a national prototype study to determine the usefulness of providing "geocoded" (geographically organized or referenced) social, economic and physical data to multi-state, State and multi-county areas.

Method: Participants in the conference included representatives from nine Federal agencies, nine universities, seven States and several innovators in geocoding and computer development. The report is an edited version of a tape recording of the conference proceedings. The conference included discussions about practical applications of geocoded data, and about problems which might be encountered in establishing and administering the ACCESS Project.

Findings: Conference participants noted that the project might find practical application in the areas of police work, natural resource inventories, monitoring population growth, mapping State and urban land use, environmental impacts, etc. Nearly all of those present agreed that available technology was not a major constraint. An obstacle to the program's success was more likely to be getting people to understand and accept the concept of data geocoding.

Conference recommendations regarding the "next steps" to be taken included assembling annotated machine-readable bibliographies of data sources for each region and devising a demonstration of what the project actually can do, based on practical issues of interest within regions. Use of the media (especially television) to promote the Project was also suggested, as was a technical analysis of the structuring of a geocoded information system.

V-10. *Title:* Regional Economic Development and Federal Legislation
Author: Stanley I. Friedlander
Organization: Economica, Inc.
Date: March 1976 *Pp.:* 53 *NTIS:* PB 256 179 *Price Code:* A04

Purpose: To identify recommendations for improving the operation of economic development districts. The underlying contention is that while these programs aim at similar goals—full employment, balanced regional economic growth—it is necessary to integrate their efforts better, so as to maximize resource use.

Method: Four major pieces of legislation are reviewed: CETA (1973), the Housing and Community Development Act (1974), the Trade Act (1972), and the Public Works and Employment Act (1976). The purpose, allocation of funds, operation, and short-comings of each act are analyzed. The paper concentrates on the inconsistencies and inadequacies within, and overlaps and conflicts between, these development programs.

Findings: A variety of recommendations for improving and creating an integrated manpower and economic development program centered on the regional district are derived. These suggestions are directed at overcoming obstacles in current legislation which impede action and resource usage. Among the recommendations are: (1) To establish economic development districts to cover the entire country along geographical boundaries approximating a functional economic area. (2) Use substantial incentives to encourage urban-suburban consortia. (3) Establish a State economic development agency to coordinate activities on the district level. (4) The EDA should provide more technical assistance and clearinghouse activities on successful projects. (5) Economic development districts should submit plans to appropriate community manpower planning and service agencies to avoid duplication or conflict.

V-11. *Title:* Proposed Information Program Concept for the Office of Economic Research (OER).
Author: Bernard D. Gross
Organization: Bernard D. Gross and Associates
Date: July 1977 *Pp.:* 47
Available from Economic Research Division, EDA.

Purpose: To define OER's current information orientation and analyze its existing information techniques so as to recommend an improved information program.

Method: The study is based primarily on 75 interviews with Economic Development Administration officials, Congressional staffers, Office of Management and Budget personnel, State and regional officials, public interest groups, academicians and business leaders. In addition, existing information systems used within EDA are reviewed and analyzed. Information distribution systems such as press releases, the NTIS system, and the Smithsonian Science Information Exchange are also analyzed.

Findings: Much improvement is needed in OER's relationships within EDA and with clientele groups. OER now has only a limited impact on EDA policy formulation and has not defined development problems in a manner that readily translates into policy responses. OER products are poorly distributed within and outside of EDA. There is considerable dissatisfaction with the lack of brief, timely, and well-written executive summaries of OER reports and much support for a stronger OER function both within and outside of the Economic Development Administration. Three information level program options are presented based upon personnel/funding limitations of OER.

V-12. *Title:* Economic Development Through State Planning
Author: David K. Hartley
Organization: American Institute of Planners
Date: August 1976 *Pp.:* 53 *NTIS:* PB 259 241 *Price Code:* A03

Purpose: To examine the interaction between State planning and economic development in order to help State planning agencies and State development agencies understand their respective roles in economic development. Analysis is intended to help State governments mobilize resources and staff for improved economic development.

Method: The project was divided into three elements: (1) a questionnaire sent to all fifty States, (2) interviews in four case-study States, and (3) the issuance of the report which summarizes and analyzes the data and results of the case studies. Various private, State, and Federal references were utilized.

Findings: Most States do not use a consistent definition of economic development. Focus is placed on current development activities (e.g., increasing the volume of new manufacturing investment) rather than on attempting to shore up weak points in a State's economy. While the executive budget is the most powerful instrument of coordination, it is used only indirectly to implement the policy imperatives of economic development. Few States are monitoring Federal economic development assistance to ensure project money is distributed in accordance with overall development policy.

V-13. *Title:* The Umbrella Planning Commission: A Model for Integrating Local Development Planning and Decision-Making
Author: Quinn Hudson
Organization: Georgia Planning Association, Inc.
Date: August 1978 *Pp.:* 63 *NTIS:* PB 297 478 *Price Code:* A04

Purpose: To present a planning model for use by local governments in co-ordinating the economic, social and physical development objectives of the community. Also, the means to effectively integrate and coordinate the planning, development, and decision-making activities of the local government with other local agencies and organizations are examined.

Method: The planning model was developed after reviewing the planning literature and taking an inventory of local agency structures and activities in Georgia. It identifies proper linkages between the planning commission and approximately 40 agencies and organizations. Also identifies review and monitoring functions required for an effective decision-making process.

The strengths and weaknesses of current local planning efforts are analyzed. Recommendations for improving and integrating these efforts are made after examining the legal and fiscal capability of each agency. Personal interviews were conducted in Cherokee County, Georgia, with representatives of local governments, special authorities, business and citizen organizations, and public utilities authorities in order to test the model and lay the groundwork for its future implementation.

Findings: Full implementation of the model is recommended. Also recommended is a study of the courts and their involvement in local planning and zoning matters. A survey of economic development organizations in Georgia to assess how the coordination of economic development can be improved is urged, as is a study of the effectiveness of the EDA assistance programs.

V-14. *Title:* Evaluating Economic Development Programs: A Methodology Handbook
Author: Raymond Milkman
Organization: Lazar Management Group, Inc.
Date: July 1978 *Pp.:* 214 *NTIS:* PB 297 725 *Price Code:* A10

Purpose: To develop a handbook for use at the local level in evaluating a variety of economic development programs in systematic, comparable ways.

Method: The overall goals of evaluation, as well as the ways that evaluation studies can be conducted are described. The concept of an evaluation "module" can be used to assess the impact of particular economic development activities. The nature of evaluation and its role in economic development are also discussed.

A sample of approximately 500 economic development organizations were surveyed to determine the nature of their program activities and their evaluation needs and interests. These organizations include State, multi-county, county and city as well as privately funded economic development groups.

Findings: The six modules developed are: job location impacts; service impact of infrastructure investments; the economic development process; economic development plans; the economic profile of an area; and special economic dislocations. Outlined for each of these modules is the problem addressed, the condition under which it should be used, and the general approach and procedure for implementation. Examples are also provided.

V-15. *Title:* Evaluation of State Planning
Author: Lynn Muchmore
Organization: Council of State Planning Agencies
Date: 1977 *Pp.:* 21 *NTIS:* PB 279 227 *Price Code:* A03

Purpose: The report identifies major elements of the State planning process and provides practical suggestions for improving them. It is intended for State planning directors who wish to evaluate their own agencies.

Method: The report consists of thirteen separate modules, each concerned with different aspects in State planning (for example, planning/budgeting, legislative relations). Each module contains introductory comments and a "checklist" of the characteristics and activities typical of State planning offices. The study highlights activities that are most effective in specific areas of planning.

Findings: The paper is largely descriptive. The author stresses the need to increase coordination on several levels, namely within the State planning mechanism, and between the Federal Government and the State, as well as with the local government.

V-16. *Title:* A Multiregional Input-Output Model for the United States
Author: Karen R. Polenske
Organization: Harvard Economic Research Project
Date: December 1970 *Pp.:* 251 *NTIS:* COM-71-00943 *Price Code:* A10

Purpose: To describe a multiregional input-output model for the United States that can be used in assessing the regional impact of a wide variety of government policies.

Method: The model includes 44 regions and 78 industries, providing for both industrial and regional detail. Five sets of multiregional input-output data have been compiled for each state: base year (1963) outputs, employment, and payrolls; 1963 interindustry flows; 1963 interregional trade flows; base year (1963) final demands; and 1970 and 1980 projected final demands. Supplemental, final demand estimates have also been made for 1947 and 1958. Using interregional trade data and projected final demands, the model projects 1970 and 1980 regional outputs and shipments of commodities among regions. The data used in the model are either from government sources (Census, Commerce, Defense, Interior, Labor) or Jack Faucett Associates.

Findings: The preliminary nature of this modeling effort made forecasting premature.

V-17. *Title:* State Economic Modeling: Techniques of State Planning
Author: Robert W. Rafuse, Jr.
Organization: Council of State Planning Agencies
Date: 1977 *Pp.:* 33 *NTIS:* PB 279 236
Price Code: A03

Purpose: To assess the potential for increased use of economic models in State planning, questions of cost, purpose, and potential benefit are addressed.

Method: Discusses the success of six specific models or approaches to modeling in actual applications to State problems. The six are:

1. The approach of Data Resources, Inc.;
2. The approach of Chase Econometric Associates, Inc.;
3. The Arizona Trade-Off Model;
4. The Utah Process;
5. The National Planning Association's Regional Economic Projections;
6. MUNIES (Municipal Impact Evaluation Systems).

These selected models are held to exemplify the major economic modeling approaches available for State planning. The essential characteristics and operation of each model are examined with emphasis on the types of policy decisions to which the model is designed to respond, the data that are required, the major costs involved, and time required to develop the model and operate it. The study is based on the author's "informal survey" of representative models.

Findings: Economic modeling at the State level is rapidly maturing and making important contributions to State policy-making. However, a more structured system of communication between model builders and users in various areas is needed. In addition, the development and operation of a reliable State economic model is an expensive endeavor, requiring an initial investment of at least $100,000 and a continuing operating budget in excess of $50,000 per year. Measures to insure personnel continuity must receive top priority; personnel turnover seriously hampers modeling efforts. Finally, experience has shown that starting small and building incrementally is probably the optimal strategy.

V-18. *Title:* Composite Mapping System
Authors: Gary G. Slack, Jay T. Carrigan, John B. Fieser
Organization: TERCON and Economic Development Administration
Date: 1975

A limited number of free copies are available from Economic Research Division, EDA.

Purpose: To develop a computer program capable of mapping spatial patterns of various phenomena to user specifications and of merging such maps into composite maps.

Method: The EDA Composite Mapping System (CMS) has been enhanced by implementing the following features: (1) scale-reduction capability; (2) map generation from point data; (3) map generation from linear data; (4) masking of external data; (5) subset map files; (6) program documentation of the foregoing features. A subsequent contract with the Federation of Rocky Mountain States yielded a machine-independent program (CMS-II) and additional features.

Findings: The CMS has been used repeatedly in socio-analysis and physical planning, by over 50 active users. The CMS-II is "particularly suited to regional, state, and metropolitan land use and socio-economic planning. It is efficient in agricultural, hydrologic, mineral, and ecological analysis, or wherever necessary to collate many forms of maps, taped data, and tabular data. Practically any area information, physical or socio-economic, can be fed into the system directly or through an intermediate step."

V-19. *Title:* Discussion of Relevance of BEA Areas to the Economic Development Administration
Author: Carl F. Snead
Organization: The Urban Institute
Date: February 1976 *Pp.:* 33 *NTIS:* PB 256 676 *Price Code:* A03

Purpose: A BEA (Bureau of Economic Analysis) Economic Area is a relatively new concept. This study analyzes in detail the benefits and limitations of utilizing BEA Areas in lieu of the traditional categorizations (SMSA's, political or administrative entities), especially with respect to their potential impact on EDA programs and studies. The study includes an assessment of the uses of BEA Areas assuming EDA did not change designation criteria.

Method: After a thorough discussion of the elements and definitional components of a BEA Area, focus is shifted to how BEA Areas could be applicable to the EDA. Economic models are then utilized to illustrate how BEA areas can be used in the study of short- and long-term economic growth, growth in per capita income, and the export base of BEA Areas. The results of a number of private studies using BEA Area data are considered.

Findings: Since BEA Areas are defined on the basis of economic relationships, they represent a clear conceptual improvement in data collection, analysis, and policy formulation. The study predicts BEA Areas will gain wider acceptance as their merits gain wider recognition.

V-20. *Title:* An Examination of the Use of Labor Force Data in Targeted Subnational Economic Development Policy
Author: David W. Stevens
Organization: National Commission on Employment and Unemployment Statistics
Date: February 1979 *Pp.:* 64 *NTIS:* PB 297 817 *Price Code:* A04

Purpose: To examine and assess the uses and appropriateness of labor force data in fulfilling EDA's mission. Measures to improve the management of targeted subnational economic development programs also are evaluated.

Method: EDA's use of labor force data to allocate EDA resources is related to its mission as defined in several laws: The Public Works and Economic Development Act of 1965, The Public Works Employment Act of 1977, The Housing and Community Development Act of 1974, Differential Investment Tax Credit and Industrial Revenue Bond Programs, and the Comprehensive Employment and Training Act (CETA) Amendments of 1978.

There are six technical problems areas encountered in analyzing allocation formulas; equity; structural aspects of the formula; nature of the data; program objectives; presence of constraints; and specification problems. All these problems are discussed. The labor force concepts in EDA's mandate are brought together with the technical aspects of allocation criteria design to determine how well the labor force components of EDA's allocative formulas capture the circumstances they are intended to address. Available data sources are also explored.

Findings: Current unemployment estimates are conceptually weak as a measure of hardship and are therefore inappropriate for EDA purposes. However, targeted subnational economic development has satisfied the minimum level of performance necessary for its continuation. Recommendations for improving the performance of targeted subnational economic development include: flexible formulas that avoid all-or-nothing determination of eligibility for an area; development of a composite index of under-utilized human potential for sub-state areas; increased effort to the determination of spatial employment opportunity; linkages between household and establishment data; and exploiting the analytical potential of existing data.

V-21. *Title:* Labor Market Considerations in Economic Development Planning
Author: David W. Stevens
Organization: Joint Center for Urban Studies, MIT-Harvard University
Date: September 1976 *Pp.:* 35 *NTIS:* PB 258 383 *Price Code:* A03

Purpose: To assess the relevance of labor market concepts and phenomena for economic development activities.

Method: Examples of different means of measuring or defining labor market concepts are highlighted. Two examples elaborated upon in the study are: 1) the concept of unemployment with its multiple definitions—structural, cyclical, seasonal, and frictional; and 2) alternative theories (human capital approach, signaling approach, and job competition model) of the mechanisms and institutions through which labor productivity is developed and applied.

Findings: Theory merits consideration and value. It "informs what we see, how observed phenomena and relationships are explained, and what action, if any, is proposed to alter existing circumstances."

Different approaches (theories) to measuring and classifying labor market concepts and phenomena result in different policy prescriptions (different intervention strategies). The choice of approach involves subjective judgement.

V-22. *Title:* IDIOM II: A User's Manual
Author: Daniel Updegrove
Organization: Institute for Demographic and Economic Studies
Date: March 1977 *Pp.:* 102 *NTIS:* PB 272 876 *Price Code:* A06

Purpose: This manual provides documentation on the theory, use, operation, and interpretation of IDIOM II, the Income Determination Input-Output Model. IDIOM II is an interactive, inter-industry, national-regional policy evaluation model, developed by the Institute for Demographic and Economic Studies and the National Bureau of Economic Research.

Method: The manual contains five sections and numerous tables and technical appendices. The first section describes the basic model, a Leontief-type model with fixed input-output coefficients, and shows how the basic model can be extended for policy evaluations. It also describes the model's use for regional studies.

The second section provides implementation information including descriptions of the model's current operating system, the computer code, and associated data files.

The third section describes the four types of results that the model provides: 1) base case national solutions; 2) national policy substitution solutions; 3) base case regional solutions; and 4) regional policy substitution solutions.

The fourth section tells how to use IDIOM II, describing the operating procedures, control variables, and special input data requirements.

The final section presents examples of the model's operation.

Findings: N/A

V-23. *Title:* Using Locally Planned Investment Strategies for Strategic Targetting of EDA Investment Funds
Author: Mark B. Urben
Organization: N/A
Date: November 1977 *Pp.:* 30

Copies available from Economic Research Division, EDA, while supply lasts.

Purpose: To assemble and demonstrate the operation of a management tool for EDA planners to use in the Special Incentives Program for assisting distressed areas in the development of economic investment strategies.

Method: A conceptual framework for an investment strategy is first developed. This framework includes an institutionalized development process and a documented investment plan, both of which establish programs designed to attract private sector funds and coordinate public sector resources. The process included identifying functional objectives, structural locations, compositions of participants, formal and informal linkages, resource availabilities, and institutional effectiveness. The investment plan describes policies, program strategies and implementation processes over a number of years.

Factors which should be considered in assessing locally-planned investment strategies are listed. These include economic distress, the presence of institutional capacity to plan, program, and implement, and a documented investment strategy.

Forty-six cities are identified for possible participation in the EDA Special Incentives Program. These cities are selected on the basis of their planning, and implementation capabilities, not for their degree of economic distress. Finally, the respective roles of regional and national agencies are described, with the need for communication between the two stressed.

Findings: Eighteen cities are "ready now" for assistance. This "management tool" offers EDA a common framework for applying a fund-allocation criteria to central city projects. Specifically, the tool provides ways for EDA to "customize" assistance to cities that are at various stages in the development process. This approach will reduce risk in allocating funds by identifying strategies with the best prospects for success. It also permits EDA to respond to local investments in a multi-year fashion, and to promote an evolutionary and balanced approach to economic development.

V-24. *Title:* A Fourth Stage in National Development? An Assessment of Research Issues Relevant to Economic Development
Author: Ralph Widner
Organization: Academy for Contemporary Problems
Date: August 1978 *Pp.:* 181 *NTIS:* PB 297 974 *Price Code:* A09

Purpose: To identify economic development and adjustment problems of the Nation, its regions and communities, as well as their implications for Federal development policies. Also inventories research questions that need to be answered and assesses the appropriateness of the research plans of the Office of Economic Research.

Method: Examines three areas of structural change. First are economic shifts, including the decline in the manufacturing share of employment growth and the increasing importance of energy and other resource constraints. Second are demographic shifts, including declines in the population growth rate, shifting migration patterns, black migration, and shifting community growth patterns. Third are regional shifts, involving metropolitan diffusion and national dispersal of population and employment.

Based on their survey of development issues, the authors compile a taxonomy of research questions. Research needs are divided into four categories: economic research, policy research, program research, and basic research and theoretical development. Each category is related to proposed or completed state, local or EDA research programs, or to opportunities for future research.

Data are taken from the U.S. Departments of Labor, and Housing and Urban Development, the Bureau of the Census, and numerous other sources.

Findings: The U.S. is in a fourth stage in the development process, the so-called "post-industrial era," which is characterized by a decentralized and diffused pattern of settlement and distribution of economic activity. Economic research programs and policy proposals should anticipate the geographic consequences of structural changes. New strategies will need to recognize the increasing scarcity of energy and other resources. Programs will need to recognize population shifts and existing regional delineations (e.g., BEA regions may have to be modified to more accurately reflect new patterns of activity). Policies will need to place an increased emphasis on the hard-core unemployment caused by the effects of structural and demographic changes on central cities.

The present and proposed research sponsored by the Office of Economic Research covers 80 percent or more of the research questions independently identified. The OER program is found to be exceptionally strong in research on regional and energy-related issues, and State economic development capacity and needs. Its program is judged to be weakest in its coverage of manpower, labor force and sectoral problems involved in community, State, and regional adjustments.

V-25. *Title:* Multistate Regional Development Issues
Author: Ralph R. Widner
Organization: Academy for Contemporary Problems
Date: 1978 *Pp.:* 34 *NTIS:* PB 298 163 *Price Code:* A03

Purpose: To provide an overview of major subnational development issues of concern to public and private leaders in each of the major Census Regions.

Method: Surveys of government, business, labor, civic, and academic leaders of each region were used to identify both interstate regional issues and shared regional issues. Interstate regional issues are defined as issues that transcend State boundaries and require cooperative action. Shared regional issues are issues that may exist locally in each State of a region and do not necessarily require interstate cooperation. A general framework of concerns is provided that might serve as the basis for determining future policies with respect to Federal support for, and participation in, multistate development organizations.

Findings: A need does exist for Federal/multistate forums. The categories of interstate interests that persist from region to region (although with some variation) are: (1) energy development; (2) transportation; (3) water resource development; (4) other natural resource development (fisheries, mining, etc.); and (5) rural poverty concentration.

The categories of shared regional problems include: (1) urban economic distress; (2) unemployment concentration; (3) underdevelopment in isolated rural areas; (4) infrastructure needs (new and renovated); and (5) growth management.

V-26. *Title:* Intergovernmental Cooperation and Subnational Development Problems; A Synthesis of Relevant Research Findings
Authors: Ralph R. Widner and Marnie Shaul
Organization: Academy for Contemporary Problems
Date: 1976 *Pp.:* 33 *NTIS:* PB 297 979 *Price Code:* A03

Purpose: To summarize research findings related to "the need for and the functioning of multistate development organizations involving Federal support and participation."

Method: Reviews findings from independent researchers as well as from studies commissioned by government agencies. Discusses the controversy over the proper approach to regionalism, i.e., national resource-based vs. urban-centered. Also, explores the problems and successes associated with sub-state and multistate planning, in particular, the Appalachian Regional Commission, the Tennessee Valley Authority and Title V Commissions.

Findings: Flexible, multi-purpose bodies are needed to encompass problem areas with conflicting objectives. Regional bodies also need grass roots support. The ineffectiveness of regional bodies stems, in part, from their inability to influence decisions by State and Federal agencies. Accordingly, future legislation should mandate explicit links. The effectiveness of regional bodies would also be improved if the planning, decision-making, and implementation responsibilities could be combined in a way that links plans to results.

V-27. *Title:* Conflicts in Federal Subnational Development Programs—An Analysis with Recommendations
Author: Harold F. Wise
Organization: The National Public Advisory Committee on Regional Development
Date: March 1976 *Pp.:* 165 *NTIS:* PB 256 266 *Price Code:* A09

Purpose: Describes and analyzes policy conflicts among Federal programs that affect economic development activities in subnational regions.

Method: Nineteen representative, Federal subnational development programs are analyzed to help identify areas of conflict among Federal programs. A conceptual approach is employed which highlights the major findings and concepts intended for in-depth follow-up studies. The *1975 Catalog of Federal Domestic Assistance* and interviews with governmental personnel in relevant agencies such as the Office of Management and Budget, the Advisory Commission on Intergovernmental Relations, and the Office of Urban Program Coordination, HUD, are the primary sources of information.

Findings: Federal development programs and agencies vary widely (and consequently often conflict) in numerous areas (for example, in patterns of program administration, in planning requirements). The committee structure of Congress based on single-purpose, functionally-oriented interests is largely the cause of these confusing differences. Congressional action is needed to establish "formal machinery" in Congress for the development and evaluation of policy related to coordinating subnational economic development programs. (An Intergovernmental and Interagency Cooperation Act is one of several recommendations.)

V-28. *Title:* Summary of Conclusions and Recommendations by Ad Hoc Review Panel Members Regarding OMB's Preliminary Working Papers: "Review of Federal Planning Requirements"
Author: Harold F. Wise
Date: November 1977 *Pp.:* 83 *NTIS:* PB 298 128 *Price Code:* A05

Purpose: To discuss and review OMB's "Review of Federal Planning Requirements: Preliminary Working Papers."

Method: Two days of panel discussions and working papers sponsored by the National Science Foundation are the core of this report. It contains brief position papers developed by panel members on various subjects concerned with Federal planning requirements.

Findings: The Office of Management and Budget report is a comprehensive and constructive contribution to an extremely complex area of public policy. Implementation of the report could result in significant improvement in planning at all levels of government.

V-29. *Title:* Making Local Economic Development Decisions: A Framework for Local Officials
Author: Harold Wolman
Organization: The Urban Institute
Date: January 1979 *Pp.:* 73 *NTIS:* 297 401 *Price Code:* A04

Purpose: To set forth a framework that will aid local officials in formulating economic policy. Also, to provide local officials with a "state-of-the-art" review of the literature in policy-related areas.

Method: Five sets of questions local officials should consider in the design of local economic policy are presented. These questions cover policy choices, information and analysis, program evaluation, implementation and institutional concerns, and resource and other constraints. Among the policy-choice questions facing the local official, the most basic are: What are the most important problems facing the local economy and which long-run goals, short-term objectives, strategies, programs, and projects should the community choose?

Information and analyses necessary to support and inform decisions represent the kind of basic information and analyses which provide the factual framework for making local economic policy choices. Program evaluation questions represent the traditional ones of policy analysis. Resource and other constraints include questions dealing with resource, political, economic, social and demographic constraints under which decisions must be made. Finally, the last set of questions concern the adequacy of the administrative organization for local economic policy and the nature of the institutional framework and business climate within which local economic activity occurs.

The social science literature on three important policy-related areas is reviewed. These areas include the determinants of a community's competitive advantage, the sources of employment change (e.g., firm in- or out-migration, firm birth or death, expansion or contraction of existing firms), and the fiscal consequences of changes in the local economic base.

Findings: This is the first phase of a two-phase study.

V-30. *Title:* State Planning Series
Organization: Council of State Planning Agencies
Date: 1977 *NTIS:* As listed below with each title. *Price Code:* Listed below.

Purpose: To discuss and assess various aspects of state planning.

Findings: Findings vary with each of the 16 reports in this series. The reports and their NTIS ordering information are:

1. *History of State Planning—An Interpretive Commentary, NTIS:* PB 279 225, *Price Code:* A04.
2. *Concepts of State Planning,* PB 279 226, A02.
3. *Evaluation of State Planning,* PB 279 227, A03.
4. *The Legal Basis for State Policy Planning,* PB 279 228, A03.
5. *State Urban Development Strategies,* PB 272 767, A03.
6. *State Development Strategies for Rural Communities,* PB 279 229, A03.
7. *State Intergovernmental Planning Strategies,* PB 279 230, A03.
8. *State Strategies for Multistate Organizations,* PB 279 231, A04.
9. *State Strategies for National Economic Policy,* PB 279 232, A03.
10. *Statewide Policy Instruments,* PB 279 233, A03.
11. *Techniques of Public Involvement,* PB 279 234, A03.
12. *Financial Planning for State Government,* PB 279 235, A04.
13. *State Economic Modeling,* PB 279 236, A03.
14. *Intergovernmental Data Issues,* PB 279 237, A03.
15. *State Economic Resource Planning: Four State Examples,* PB 279 238, A04.
16. *State Planning in Action: Proceedings of CSPA Regional Meetings, Fall 1976,* PB 279 239, A06.

VI. Business Development

The focus of much of EDA's research in the area of business development has been business and industrial firm location. That is, why do firms locate where they do, and what sorts of public sector actions would induce these firms to locate in economically distressed areas? Several studies discuss the problems distressed areas have in attracting business, and the public sector actions advocated in several papers include improved access to capital markets and to technical assistance.

VI–1. *Title:* Mobilizing Capital for Economic Development: Institutional Innovation and the New Urban Policy
Author: Peter J. Bearse, editor
Organization: Woodrow Wilson School, Princeton University
Date: August 1978 *Pp.:* 390 *NTIS:* PB 294 399 *Price Code:* A17

Purpose: This volume presents papers and proceedings from a conference held in Princeton, New Jersey, in April 1978. The conference was organized to explore the government's role in mobilizing capital for economic development.

Method: In this edited version, the conference papers and proceedings are focused on the role of capital in the economic problems of the Northeast, sources of capital and innovative uses, the interaction of urban and social policy concerns with capital mobilization objectives, and a public investment banking facility.

Included are analyses of statutory and regulatory constraints on several sources of capital. Examples of several institutional innovations designed by States to foster the commercial exploitation of new technologies are cited. Also included is a study which indicates that investment problems are not limited to urban industrial areas.

The capital and urban social policy papers cover community and employee ownership and control, manpower and training programs (CETA), and disinvestment caused by redlining.

Conference participants represented the Woodrow Wilson School, the Federal Government, the White House and business.

Findings: Capital is only one factor among many which needs urgent attention. In distressed inner city areas, capital cost and availability are often less significant than lack of entrepreneurship (investment management) and expertise. A simple dichotomy between public and private sector ventures no longer fits reality. Many of today's organizational schemes fall somewhere in between the two, in that they are exposed to risk but pursue public development objectives. Local units are often able to make the best decisions involving the trade-off between needs and efficiency of investment alternatives. Finally, the conference reached a consensus on desirable features for the design of a national development bank: flexibility, decentralization, specialization, private participation balanced by public accountability, and separation of the functions of development and finance.

VI–2. *Title:* Establishing a National Development Bank
Author: Ben Chinitz and Chuck Fairchild
Organization: Abt Associates
Date: 1975 *Pp.:* 58

Copies available from Economic Research Division, EDA, while supply lasts.

Purpose: To investigate the issues surrounding the concept and establishment of a National Development Bank.

Method: After evaluating the operation of capital markets and the method in which capital shortages result, the authors consider the possibility of solving current development financing problems within the existing institutional structure. Experiences with development banks, both foreign and domestic, are then considered. An appendix containing various development bank proposals submitted to the United States Congress is included.

Findings: It would be socially desirable to create a National Development Bank. "Crowding out" by private organizations does exist in capital markets. This adversely affects the level of socially-desired capital formation. A National Development Bank is defined as a new semi-public lending institution (financed from both public and private sources and lending to both private and public borrowers) that would specialize in the financing of large-scale complex projects which are developmental in nature. These projects in particular have a difficult time in establishing sufficient capital on appropriate terms. Further, the study recommends the Bank not be empowered to initiate and coordinate regional and interregional development planning. The initiative would remain with private and public developers to conceive and implement projects and the Bank act as disciplinary force on the borrowers.

VI-3. *Title:* Industrial Location Determinants, 1971-1975
Author: Economic Development Administration
Organization: U.S. Department of Commerce
Date: February 1973 *Pp.:* 480 *NTIS:* COM-73-90016 *Price Code:* A21

Purpose: Identifies various community and plant site characteristics that influence firm decisions to move or expand. It was compiled to assist EDA-eligible areas to identify and attract industries with locational requirements compatible with the areas' resources.

Method: This document contains results of a special survey of manufacturing firms. Over 8,000 questionnaires were mailed by the Census Bureau in 1972 to some 2,950 firms in over 250 selected product classes (5-digit SIC codes), which had demonstrated reasonable growth between 1958 and 1967. Survey responses are aggregated by product class, but no analysis is provided.

Findings: For each product class, the inventory of survey results gives the following information:

1. Product Class Name and Number;
2. Number of Firms Responding to Questionnaires;
3. Per Cent of Firms Planning to Establish Facilities at New Locations or Expand;
4. Location of New or Expanded Establishment (central city, metropolitan, industrial park);
5. Community Size Preference (population);
6. Plant Site Size Preference (no. of acres);
7. Number of Employees at New or Expanded Plant (at full operation);
8. Community Attributes Desired in Plant Location;
9. Plant Site Features Desired;
10. Locational Objectives To Be Achieved.

VI-4. *Title:* Effectiveness of Financial Incentives on Investments in the Economic Development Administration's Designated Areas
Authors: Jack G. Faucett and John J. Pershing
Organization: Jack Faucett Associates
Date: June 1976 *Pp.:* 68 *NTIS:* PB 256 675 *Price Code:* A05

Purpose: To investigate the most cost-effective policies for stimulating private job-creation in labor-surplus areas. Also, to identify the benefit/cost ratios of these policies with respect to the total economic welfare, and to address how these policies can best be administered so as to minimize adverse impacts in the market and inequities among citizens.

Method: The major forms for financial incentives are categorized and evaluated. Information pertinent to foreign experience with various incentives is included for informational and comparative purposes. Data used in the evaluation of incentives were compiled from various Federal and private organizational studies.

Findings: A combination capital/operating subsidy is the most cost-effective method to induce new or expanded business operations in a targeted area. For national companies, tax subsidies provide the greatest inducement. Guaranteed or direct loans provide the most efficient method for government to assume a capital risk. With respect to firms employing low-skilled labor, wage subsidies appear most cost-effective for both local and national firms for inducing new or expanded plants. Corporate income tax subsidies are especially inefficient as financial incentives and tax-exempt industrial development revenue bonds are not cost-effective.

VI-5. *Title:* A System for the Analysis, Evaluation and Design of Organizations, Work, and Jobs
Author: Charles W. Lachenmeyer
Organization: St. John's University
Date: 1976 *Pp.:* 108 *NTIS:* PB 265 159 *Price Code:* A06

Purpose: To present a viable theory of design of jobs and organizations. Also critiques traditional job-analysis approaches.

Method: The components of a viable theory of job analysis are listed. The job analytic system advocated by the study is presented in detail in the form of an ordered series of questions, categorized according to the four components of the system.

The second part of the report compares past job-analysis theory with the proposed system, highlighting disadvantages of traditional approaches and advantages of the present job analytic system. The critique of traditional job analysis approaches was the result of an "exhaustive" review of two bodies of research and theory: job design and job analysis.

Findings: When applied to a job situation, the job analytic system presented will produce a complete analysis of that situation including: (1) job descriptions, (2) the evaluation of employee performance in those jobs, (3) the assessment of the adequacy of the jobs and of the relations within the organization, and (4) the generation of all the possible changes in the jobs. These are the components essential for a complete and sufficient theory of design of jobs and organizations.

Traditional approaches are deficient for three primary reasons: (1) they are not sufficiently systematically detailed, (2) the methodologies for gathering the job descriptions are typically devoid of any criteria for testing the sufficiency of the descriptions, and (3) these approaches do not account for functional relations among jobs.

VI-6. *Title:* Tourism in the United States—Potentials and Problems
Organization: Leisure Systems, Inc.
Date: January 1976 *Pp.:* 25 *NTIS:* PB 259 546 *Price Code:* A03

Purpose: To discuss both the potential economic impact the tourism industry could have as well as some of the problems and limitations that currently exist.

Method: The tourist industry is defined as an industry which provides people recreation, pleasure, and/or escape in an away-from-home environment. After narrowing the definition of tourist to exclude functional transportation enroute and ancillary services, each of the generic categories of the tourist industry are evaluated. These include: lodgings, amusement parks, scenic attractions, beaches and marinas, museums, and food services. A bibliography of selected private and government sources is provided.

Findings: Tourism is discussed in the context of being a business and, thus, subject to careful business evaluations and realities. Marketing, management, sales, optimum size, investment, and product and competition must each be analyzed. Too often, government tourist officials are recruited from advertising fields and do not fully understand the intrinsic complexities of the tourist business. Government officials tend to overemphasize promotional efforts. A need exists, both nationally and regionally, for more operational data and more professionally and educated personnel at all levels.

VI-7. *Title:* Comments on Kelso's "Two Factor Theory" and Employee Stock Option Programs (ESOP's)
Author: Monroe Newman
Date: July 1976 *Pp.:* 27 *NTIS:* PB 270 095 *Price Code:* A03

Purpose: To evaluate the implications of increased participation in capital ownership through Employee Stock Option Programs, as proposed by Louis O. Kelso in his book, *Two Factor Theory.*

Method: The author analyzes Employee Stock Option Programs with respect to their impacts on: (1) the shortage of investible funds; (2) corporate tax benefits; (3) labor participation in management; and (4) income protection for employees. *Two Factor Theory* is critiqued from a theoretical point of view, using frequent references to economic principles to illustrate alleged misconceptions by Kelso.

Findings: Employee Stock Option Programs are not based on Kelso's theory but are based on peculiarities in the corporate income tax laws that permit before-tax payments for fringe benefits to be used as a source of corporate capital. If Employee Stock Option Programs are to be supported as a financial device, it must be on some other personally or socially established goal. *Two Factor Theory* is based on a misunderstanding of modern economics.

VI-8. *Title:* The Reliability of Industrial Location Surveys
Author: Sharon Oster
Organization: Yale University
Date: June 1976 *Pp.:* 19 *NTIS:* PB 257 015 *Price Code:* A02

Purpose: To test the consistency between: (1) survey data on the determinants of industrial location and; (2) data on factor requirements in particular industries. Also identifies the area and site attributes found to be important to location decisions.

Method: The survey chosen for testing was EDA's 1971 Survey of Industrial Location Determinants. In that survey, over 2,500 firms in 222 5-digit SIC codes were asked to specify the importance to their locational decisions of 30 area and site attributes.

The reliability of survey responses (as well as the sensibility of locational decisions) is tested by correlating, by industry groups, the attributes listed as either critical or important to some objective features of the production process used in the various industries. Multivariate regressions are run by industry using various area or site attributes as dependent variables, and independent data on features important to production processes as independent variables. A correlation matrix of locational determinants is constructed to examine the interrelationships between attributes.

Findings: Survey data on the determinants of industrial location may be quite reliable. In fact, properly-designed surveys may provide more information on how firms choose locations than a commonly-used alternative, revealed preference (which infers locational preference from observed locational patterns).

Critical site attributes included access to highways and railroads, access to labor (with skilled labor weighed slightly higher), tax incentives, access to natural gas, and availability of high quality public services (water, sewer, police and fire protection, etc.). One policy implication is that tax reductions to lure new firms, coupled with reductions in public services (e.g., waste treatment facilities), may *not* be the optimal development strategy for many localities to follow. Firms are seeking out locations with access to high quality waste treatment facilities in order to comply with pollution laws at least cost.

VI-9. *Title:* A Review of the 1971 EDA Location Survey
Author: Sharon Oster
Organization: Yale University
Date: May 1975 *Pp.:* 60 *NTIS:* PB 257 661 *Price Code:* A03

Purpose: To improve, update, and validate EDA's 1970 Survey of Industrial Location Determinants.

Method: Reviews the theoretical and empirical literature on industrial location, including hypotheses about firm objectives, industry structure, information and uncertainty on firms' location decisions. Empirical studies of industrial location are divided into two types: revealed preference analysis, and industrial surveys. The merits and shortcomings of each type are discussed, and specific empirical studies of each type are presented.

The author then reviews the 1971 EDA Survey and results. Some statistical tests are made of the conformity of the actual survey responses to those which might be expected from theory. For example, regressions are run to test the correlation of reported data on area and site attributes to independent data on production features, by industry group.

The 1971 Survey is then updated and revised in recognition of changes in the real world and theoretical advancements. The effect of changes in business cycles, the rapid oil price increase, and the imposition of stricter environmental controls by governments, as well as an extended theory to account for the increased roles of imperfect information and uncertainty are examined and placed in a revised survey.

The study utilizes data from the U.S. Department of Commerce, Federal Energy Agency, and several other sources.

Findings: A revised survey questionnaire is presented which better tests theories of firm industrial location decisions, particularly with respect to search costs of new sites. Questions on the role of energy prices/availability, personal preference for an area, and ownership patterns are added. However, the 1971 Survey appears to be sensible and quite useful.

VI-10. *Title:* The Manufacturing Location Decision: Evidence from Cincinnati and New England
Author: Roger W. Schmenner
Organization: Harvard Business School
Date: March, 1978 *Pp.:* 393 *NTIS:* PB 283 457 *Price Code:* A17

Purpose: To analyze the domestic location decision of manufacturing plants and to evaluate how and why these locations have been shifting over time.

Method: The study focuses on the Cincinnati metropolitan area over the period 1971 to 1975 and on the New England region over the period 1970 to 1976. All types of manufacturing industries in these locations are analyzed by use of data obtained from government, Dun and Bradstreet, private sources and the extensive use of questionnaires sent to manufacturing plants in the survey areas.

Findings: Evidence does not support the emphasis being placed on tax and financial incentives and on-site preparation as cornerstones of urban economic development policies. Both these policies have proven largely ineffective.

Rather, emphasis should be placed on: (1) facilitating the on-site expansion of companies already residing in a city; (2) helping small, growing plants to find new or additional space within a city; and (3) promoting the city's advantages as an initial location for new incorporations and new branch plants.

VI-11. *Title:* The Role of Entrepreneurship in Economic Development at the Less-Than-National-Level
Author: Albert Shapero
Organization: University of Texas (Austin)
Date: January 1977 *Pp.:* 78 *NTIS:* PB 264 238 *Price Code:* A05

Purpose: To examine the effect of entrepreneurship on economic development at the local level and to offer a reseach agenda for consideration by EDA.

Method: Various views of entrepreneurship and its relationship to economic development are delineated. While some regard the entrepreneur as the *sine qua non* of economic development, others treat entrepreneurship as a catch-all residual factor.

A literature review of one aspect of entrepreneurship—the company formation process—is also provided. This review focuses on the factors that affect the number of new firms in a given community.

Findings: Entrepreneurship involves a multiplicity of independent decision-making units, each with a somewhat different vantage point. This variety of assessments provides a higher likelihood that decisions are made with a local orientation. Entrepreneurship provides an outlet for new ideas and products. Society is provided with a relatively low risk, low (acturial) cost approach to the problem of testing new ideas. Even entrepreneurial failures have positive effects, providing valuable social learning at very little political and economic risk.

Only through further research can EDA and other interested organizations acquire the body of knowledge, techniques, and data needed to stimulate entrepreneurship. Needed are studies of: regional differences in company formation and failure, the effects of Federal legislation on company formation, minority entrepreneurship, venture-capital financing, and the factors that lead to company failure.

VI-12. *Title:* A Proposal for a Development Bank for the United States
Author: Edward D. Smith
Date: February 1977 *Pp.:* 28 *NTIS:* PB 267 763 *Price Code:* A03

Purpose: To discuss the role of a national development bank and to propose specific guidelines for its administration.

Method: The essential elements in the structure of a national development bank are discussed (for example, its lending authority and lending limits). The bank's charter is discussed. Effective forces ensuring financial viability of the development bank are reviewed. The study is a discussion paper for an *ad hoc* advisory group meeting of the Economic Development Administration, U.S. Department of Commerce, March 1977.

Findings: There is a need for a coordinated national program of development. This can best be fulfilled through the creation of a national development bank. Such a development bank can help spur growth within the country, increase efficiency in the government, and return to States and localities greater control in their affairs. A national development bank should work with existing development and financial institutions, i.e. the bank's role should be similar to that of a central bank. The bank's lending authority should include loans to small businesses and minority enterprises, and working capital to businesses in depressed areas. Loan guarantees should also be a function of the bank. The limits on its lending authority include minimal limits on the interest rate of loans. The bank should be a federally chartered, quasi-public institution. Careful attention to the quality of loans and management that is sufficiently shielded from political factors are two means of ensuring financial soundness of the development bank.

VI-13. *Title:* The Unemployment Insurance Tax Structure in New York State
Author: William Wallace, *et al.*
Organization: RRC International, Inc.
Date: January 1979 *Pp.:* 143 *NTIS:* PB 298 560 *Price Code:* A07

Purpose: To provide material useful to the development of a new tax table of unemployment insurance payroll tax rates.

Method: After a review of the New York State Unemployment Insurance progran, discussion shifts to evaluation of experience rating (variable tax rates indexed to a firm's employment record) and the impact of experience rating on seasonal industries. Finally, the

"Mercer Model" developed for the New York State Department of Labor and used to project an actual or proposed tax plan through various employment cycles is analyzed. Data from various New York State agencies are utilized.

Findings: Without a change in current legislation, the Unemployment Insurance fund deficit will continue to increase as long as New York State's unemployment rate is above 6.2 percent. Debate on experience rating centers around two issues: (1) the efficacy and equity of this system as a means of allocating the cost of the program; and (2) its effectiveness as an incentive to stabilize employment. Seasonal industries bear a greater tax burden under the experience rating system than do non-seasonal industries. Concerning the Mercer Model, the model is intended only for interating maximum and minimum tax rates; it is not a complete solution for generating and evaluating new Unemployment Insurance tax tables.

VII. Sectoral Analysis

Changes in the sectoral (industrial) composition of national output and sector productivity can have profound impacts on regional and urban growth patterns. For example, the decline of one dominant industry could cause the decline of an entire urban or regional economy. A knowledge of sectoral and intersectoral trends is therefore necessary for a better understanding of the economic changes occurring in the regions and urban areas of the United States.

EDA has supported the development and refinement of several intersectoral studies, including the Multiregional Input-Output Model (MRIO) and the Income Determination Input-Output Model (IDIOM). However, much work remains to be done in the analysis of the relationships of sectoral trends and domestic economic development.

VIII. Regulation

EDA research in this problem area has been primarily concerned with the effects of environmental regulation on economic development. Although the goals of most regulatory actions are widely accepted, it must be recognized that these actions also entail important costs. For example, environmental regulation may impede firm formation or induce plant closure, resulting in lost jobs. As a result, the central policy problem for developers becomes how to minimize these kinds of dislocations without sacrificing regulatory goals.

VIII-1. *Title:* Effects of Environmental Protection Regulation on Regional Economic Development
Author: Frank H. Troutman, *et al.*
Organization: University of Arkansas
Date: September 1977 *Pp.:* 137 *NTIS:* PB 278 918 *Price Code:* A07

Purpose: To assess the impacts (costs) of environmental regulations and energy shortages on economic development.

Method: Four studies are presented. The first two specifically address the economic costs of environmental protection controls. Relevant environmental protection legislation is reviewed. Sources referred to include the 10th Annual McGraw-Hill Survey, Chase Econometric Associates, Inc., Bureau of Labor Statistics (Department of Labor), and Bureau of Economic Analysis (Department of Commerce).

The third study addresses the economic impact of increasing energy costs. The long-term economic impact on the Arkansas economy of using Western coal as well as Arkansas lignite is examined.

The final study highlights a "development plan that can achieve maximum industrial development while minimizing environmental disruption." The plan involves the cooperation of private industry and public utilities in reducing environmental control and energy costs.

Findings: Environmental protection regulations are in need of thorough re-evaluation. The economic costs of such controls presently outweigh any environmental benefits that might accrue from these controls. The environmental regulations actually prohibit the development of pollution control technology. Furthermore, the controls are inadequately applied. The deleterious economic repercussions of controls (and rising energy costs) are greater in economically distressed areas. In addition, the intertwined forces of environmental control legislation and energy shortages affect industrial location and impose barriers to industrial expansion.

VIII-2. *Title:* Relationship of Environmental Improvement Efforts on Development in Economically Distressed Areas
Author: Booz, Allen and Hamilton, Inc.
Date: May 1976 *Pp.:* 27 *NTIS:* PB 256 702 *Price Code:* A03

Purpose: To analyze the interface of EPA and EDA programs and develop the policy implications for EDA.

Method: The authors summarize the legislative history and implementation of EPA and EDA programs. They analyze environmental legislation such as the Clean Air Act of 1970, the Federal Water Pollution Control Act and their amendments. They also use interviews with key governmental personnel at EPA and EDA to formulate policy implications for EDA.

Findings: EPA's environmental protection standards increase industry costs. These cost increases may result in closure and unemployment. The differential enforcement of such standards across regions affects industry location and redefines the balance between urban and rural centers. Programs designed to increase economic activity in distressed areas are hindered by environmental control measures. Research should be conducted on such topics as the dynamics of the economic development process, the relationship between environmental regulation and the economic development process, and the dynamics of economic development planning and pollution control at the State, regional, and local level.

IX. Natural Resources

The energy crisis of the early 1970's and subsequent world events have led to heightened awareness of the potential economic impact of higher energy prices and uncertain supplies. While some areas benefit from increased energy production and higher energy prices, net consuming areas are hurt. Such a natural resource supply constraint can impede an area's economic development.

Recent EDA research focuses on the short- and long-run economic consequences of increased energy prices. The energy- and natural resource-related development problems of specific regions are also investigated. For example, an EDA-funded study of the water resource problems of the High Plains region is expected to be completed in 1982. In New England energy is a prime development concern at the present time.

IX-1. *Title:* Energy: The New Economic Development Wildcard
Author: Shirley P. Burggraf
Organization: Florida A & M University
Date: January 1978 *Pp.:* 55 *NTIS:* PB 282 494 *Price Code:* A04

Purpose: Examines the impact of energy availability and cost on the interregional pattern of economic development. Specific issues include: energy-related dislocations as a factor in firm location and survival, the size of interregional income transfers due to energy prices and the longer-term effect of energy on the regional distribution of income.

Method: Studies by the Oak Ridge National Laboratory[*] were used to calculate energy consumption/production differentials by States and regions and to estimate regional imports or exports and the direction of the subsequent income transfer. States are ranked according to energy-advantage and per capita income to ascertain whether energy cost/availability were provided by the Federal Power Commission.

Findings: Energy costs vary widely by States and regions. The highest costs and largest recent increases have occurred in areas where the abundance of energy production is greatest. The statistical correlation between local energy prices and local net production is very weak. But these transfers appear to make per capita incomes more equal across regions in most cases.

Rising energy prices have resulted in income transfers between energy consuming and producing States, representing shifts in buying power from one market to another.

IX-2. *Title:* A Study Design for the High Plains Development Project
Author: Kenneth Frederick
Organization: Resources for the Future, Inc.
Date: July 1976 *Pp.:* 115 *NTIS:* PB 297 810 *Price Code:* A06

Purpose: To outline a study design that would: 1) determine policy alternatives for the High Plains with respect to the region's declining water and energy resources; and 2) assess the local, State, and national implications of these alternative development strategies.

Method: A detailed chronology of the project is provided by means of a project schedule, a milestone chart, and a flow chart. The functions of the various project groups and participants are described. Necessary qualifications of the participants involved are highlighted. Preliminary cost estimates are given. An extensive indexed bibliography including published and unpublished materials as well as organizations relevant to the proposed study is included in the appendix. Finally, a second appendix lists the people contacted in designing the High Plains study.

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[*] Ongoing EDA-sponsored series entitled "Energy Availabilities for State and Local Development." Volumes available at present are:
Volume I: *A Methodolpgical and Data Overview, NTIS:* ORNL/TM-5890, *Price Code:* A04.
Volume II: *1972 Data Volume, NTIS:* ORNL/TM-5890/S1, *Price Code:* A12.
Volume III: *1973 Data Volume, NTIS:* ORNL/TM-5890/S2, *Price Code:* A12.
Volume IV: *1974 Data Volume, NTIS:* ORNL/TM-5890/S3, *Price Code:* A12.
Volume V: *Projected Energy Patterns for 1980 and 1985, NTIS:* ORNL/TM-5890/S4, *Price Code:* A23.

Findings: The High Plains region is dependent on a "rapidly declining and essentially nonrenewable supply of ground water." In addition, the region's economy is faced with declining oil and gas reserves. The development policies adopted will determine the long-run welfare of the region. An examination of policy alternatives is thus an essential prerequisite for policy implementation.

The study design would project the region's water and energy shortages and examine the relationship between these resources and economic growth "under an array of policy-induced changes in the technological, economic, social, and governmental environment." The participants would include: 1) the Principal Contractor; 2) the General Advisory Board; 3) six State advisory boards; 4) three sets of State research groups, and 5) nine assessment groups (assessing, for example, dryland farming, crop prices, and national and regional impacts). The study's duration would be approximately three and one-half years; the project cost—$5,432,580.

IX-3. *Title:* Energy for the Growing South
Author: Russell L. Howard
Organization: Phillips Petroleum Company
Date: January, 1977

Published in: *The Future of the South's Economy, NTIS:* PB 268 469, *Price Code:* A11

Purpose: This is an occasional paper commissioned by the Southern Growth Policies Board and presented to a conference on the future of the South's economy. It addresses general energy issues relevant to the Southern economy.

Method: A general overview of energy issues, from both a national and Southern perspective, is presented. Energy reserves, production and consumption rates between the South and the Nation are compared and contrasted. Data are provided on known domestic energy resources, oil and natural gas production and consumption, and motor fuel, household and commercial energy consumption.

Findings: The South is relatively well-endowed with conventional energy sources (crude oil, natural gas and coal), and holds almost one-third of the Nation's known uranium reserves. The proximity of resources in the South will result in relatively lower energy costs than in other areas of the country. Net exports of energy have a favorable effect on the region's balance of payments. In the short- and medium-term, greater reliance must be placed on nuclear power and coal. Oil shale, tar sands, wind, tidal and solar energy will not become significant factors until the twenty-first century.

IX-4. *Title:* Mobile Nuclear Power Plants: Initial Feasibility Study
Author: D.W. Jones
Organization: Memphis State University
Date: May 1976 *Pp.:* 33 *NTIS:* PB 258 232 *Price Code:* A03

Purpose: To study the feasibility of mobile nuclear power plants.

Method: The concept and history of mobile nuclear power plants are discussed as well as their potential utilization for industrial, military, transportation, and civil needs. Technical and economic feasibility are reviewed and specific milestones are proposed for development and usage. An appendix discusses the use of the consolidated nuclear steam generator power plant now under development by Babcock and Wilcox Corp.

Data for this study came mainly from the Oak Ridge National Laboratory and the U.S. Atomic Energy Commission. Studies by individuals such as R.W. Barnes, "New Energy Sources for Process Heat" for Dow Chemical Company, 1975, and J. Papamarcos, "Industrial Power Plants: New Options and Problems," 1975, are also utilized.

Findings: A potential market exists for mobile nuclear power plants, especially by the military for wartime and emergency use. It is also felt that nuclear power is a viable energy source for water transportation, as well as for small nations.

Small, mobile nuclear plants are technically feasible but the optimum design of reactor and plant have not been achieved. Therefore, a detailed design study of a modular construction for industry is suggested. As for economic feasibility, they are not presently cost-competitive with alternative sources of nuclear energy but could become so through design and construction breakthroughs which reduce initial unit cost. Faster licensing, reduced environmental regulation, and standardized training procedures for personnel would also reduce start-up costs.

IX-5. *Title:* Regional Economic Consequences of High Energy Prices in the United States
Author: William H. Miernyk
Organization: West Virginia University
Date: Spring 1976 *Pp.:* 26

Copies available from Economic Research Division, EDA, or see Spring 1976 issue of the *Journal of Energy and Development.*

Purpose: Assesses the regional economic consequences of the changing relationship between energy prices, primarily coal, and other prices.

Method: The author's analysis is based on the assumption that high energy prices are here to stay and that high future demand relative to supply will keep energy prices rising faster than other wholesale prices. The paper begins with a discussion of the oil embargo and its effect on energy prices. The long-run energy outlook and the long-run regional consequences of high energy prices are discussed. Potential income transfers between energy consuming States and energy producing States are also considered. The study concludes by assessing the impact of changing energy prices on regional development policy.

Statistical data come from the following sources: data for energy production and prices from *Minerals Yearbook,* regional coal supply curves for 1985 estimated by the Federal Energy Administration and employment figures for primary energy reduction from County Business Patterns. Several independent studies are cited.

Findings: High energy costs will have a retarding effect on economic growth in general, with differential regional impact. In the short-run, there will be increases in coal revenues and tax receipts to coal producing States. This will have an immediate regional impact of cushioning the recession in energy producing States and worsening it in energy consuming States.

In the long-run, there will be a shift of real income from energy consumers to energy producers. The energy producing States will impose higher taxes on coal to recapture economic rents formerly going to consumers in other regions. The first impact will be a rapid increase in the price of electric energy. The second impact will be a shift in location of industry to lower power-cost locations. The disadvantaged energy consuming States could become depressed areas if jobs lost could not be replaced by a new growth sector.

Typical regional development investment approaches in private activities or in public works to stimulate growth will not work in disadvantaged areas. The only solution may be to admit that these areas are overgrown and underfinanced and to make the long-run adjustments in attitudes towards slower growth that will be needed.

IX-6. *Title:* Regional Impacts of Rising Energy Prices
Authors: William H. Miernyk, Frank Giarrantani, Charles F. Socher, John T. Sears and Larry R. Padgett
Organization: West Virginia University
Date: August 1977 *Pp.:* 157

Limited number of copies are available from Economic Research Division, EDA. Also published by Ballinger, 1978.

Purpose: To assess the regional impacts of rising energy prices.

Method: A series of related regional growth studies are presented (for example, "The Northeast Isn't What It Used To Be", "Application of an Interindustry Supply Model to Energy Issues", "Simulating Industrial Location to Minimize Energy Costs"). Various methodological approaches are taken (for example, descriptive overview, input-output model application, computer simulation exercise). Unlike the traditional (demand-oriented) literature of regional economic growth, these studies deal with supply constraints and the effects of these constraints on regional development.

Findings: Energy will become increasingly important as a locational determinant of industry. Energy-producing States will attract more manufacturing activities. The Northeast, while likely to suffer from an out-migration of energy-intensive industry, will not become an economic disaster area. Creating public awareness to the need of making various adjustments due to energy price increases may prove a very difficult task.

IX-7. *Title:* Energy and Income in Arkansas
Authors: John H. Opitz and Frank H. Troutman
Organization: Industrial Research and Extension Center, University of Arkansas
Date: May 1977 *Pp.:* 29 *NTIS:* PB 268 291 *Price Code:* A03

Purpose: To assess the long-term economic impact on the Arkansas economy that would result from the use of Western coal in electric power generation. To assess the feasibility of using Arkansas lignite for electric power generation.

Method: The national energy policy and Arkansas' energy policy are reviewed. Various cost estimates for generating electric power in

Arkansas from Western coal and Arkansas lignite are compared for 1976 and 1983–1986. Total costs include mining costs, taxes, transportation costs, environmental costs, and differences in plant design. The impact on personal income and tax revenues of using alternative fuels in Arkansas over the years 1983–1986 is assessed. In addition, the impact of technology on the economic feasibility of lignite and coal is examined. The findings are computed by the Industrial Research and Extension Center from data obtained from various regional energy commissions, companies, and utilities.

Findings: The total variable cost estimates of lignite are less than that of coal. By 1986, the net impact on Arkansas' total personal income from using local lignite rather than Western coal could be $504.6 million. (Use of Western coal could create an annual income leakage of up to $314.9 million of personal income from Arkansas' economy; the use of lignite could create an income flow of $189.7 million). This income gain could support an additional 37,000 jobs in Arkansas. By 1986, the net impact on State revenues from the use of lignite rather than out-of-state coal could be $45.8 million.

IX-8. *Title:* New England Blueprint for Energy Action: Preliminary Report for Public Review
Author: Bailey Spencer, ed.
Organization: New England Energy Congress
Date: November 1978 *Pp.:* 298

Not available. This is only a preliminary report.

Purpose: To analyze the worsening energy situation in New England and to stimulate public input on the preliminary findings and recommendations of the New England Energy Congress.

Method: The 120 delegates who participated in the Congress worked to frame and substantiate energy proposals. Preliminary findings and recommendations are the product of over 100 meetings of the six committees and their subcommittees. These committees include: New England Energy Supply, Economic Development through Alternative Sources of Energy, New England Energy Demand, Energy Conservation, Regulatory and Institutional Processes, and Energy Economics and Financing. After all committees incorporate all public input generated by this report, the New England Energy Congress will release a New England Blueprint for Energy Action.

Findings: Although the recommendations of the six committees are diverse, agreement exists on the need for alternative energy sources: wood, peat, wind, solar, hydro. Recommendations to conserve energy include: home energy audits, conservation tax incentives, conservation regulations, and increased funding of alternative transportation modes.

IX-9. *Title:* Socio-Economic and Environmental Interactions in the Upper Main Stem Sub-Basin of the Colorado River Basin: Three Alternative Energy Development Futures
Authors: Bernard Udis and Robert C. Hess, eds.
Organization: University of Colorado
Date: December 1976 *Pp.:* 213 *NTIS:* PB 266 082 *Price Code:* A13

Purpose: To estimate the employment, socioeconomic, and environmental impacts of three alternative scenarios for underground coal development, against a baseline scenario for a region along the North Fork of the Gunnison River.

Method: A baseline scenario for coal development in a region encompassing seven counties and eight Census County Divisions (CCD's) in western Colorado is developed. This baseline assumes the continuance through 1980 of trends in coal production observed during the decade 1960–1970. Three off-trend projections were also made to take into account an increased demand for relatively attractive North Fork coal. The scenarios assumed increased coal output from mines in various parts of the region. The coal could be either exported or kept to fuel a hypothetical power plant.

The study simulated the impacts of the alternate scenarios upon the region's level of employment, socio-economic framework, and air and water quality. Attention was focused on the years prior to 1980, when the region was likely to undergo the stresses of expansion. Shift-share analysis, impact analysis, a hydrological model, and an Air Pollution Generation and Dispersion Model were utilized in the analysis.

Findings: Increased demand for coal will add from 1700 to 2200 extra jobs to the seven-county area (to a baseline of 46,000). Because many of the construction jobs (for the power plant) would not be permanent, however, a "boom/bust" cycle may develop.

Population growth rates will increase, especially in the immediate areas surrounding the increased mining activity. This will create a need for more housing and schools. At first, these increased demands could be met by temporary facilities (mobile homes, temporary classrooms); eventually they would have to be met by more permanent ones.

The simulation results show little impact on the water quality of the region's three basins. Salinity effects are minor; total dissolved solids are likely to increase only slightly. The chief addition to air pollution in the region would come from the operation of the power plant.

X. Rapid Growth/Boom Towns

Rapid growth through the development of new energy or mineral resources may cause an area to experience the "boom town" phenomenon. This phenomenon is characterized by a mismatch between the peak and long-term needs of an area for schools, housing, roads, etc. Fiscal strain may also result if demands for public services are immediate and heavy. Environmental damage may also make the economic boom a mixed blessing. The need for development planning in such areas is often acute. No recent EDA studies have considered the special development problems created by boom towns.

XI. Cyclical Unemployment

Cyclical unemployment results from fluctuations in the level of business activity. Such fluctuations typically affect the entire economy but may have disproportionate sectoral impact on particular industries, areas, or regions. In addition to general fiscal and monetary policies, policy responses may include public works programs and public service employment.

Common issues reviewed in recent EDA studies include the objectives and goals of countercyclical devices, the financing and employment impacts of these stabilizing instruments, and the regional characteristics of business cycles. Proposed further research suggested in the studies could include the identification of leading indicators, determinants, and timing of regional business cycles.

XI-1. *Title:* PSE in Perspective
Author: Robert F. Cook
Organization: The Brookings Institution
Date: June 1978 *Pp.:* 49

Draft copy available from Economic Research Division, EDA, while supply lasts.

Purpose: To assess the fiscal and other impacts of Public Service Employment on cities.

Method: Provides a comprehensive history of Public Service Employment in the United States, starting with the Works Progress Administration (WPA) in 1935 and culminating with the Emergency Jobs Program Extension Act of 1976. The legislative objectives (decentralization and decategorization, training, transition, job creation, economic stimulus, public service provision and targeting) are then analyzed. Data are taken from various Federal reports as well as prior Brookings Institution studies.

Findings: To some extent Federal PSE funds displace local funding. In this respect, PSE operates as a countercyclical revenue sharing scheme by relieving pressure on the local tax base. This fiscal relief may operate as a stimulus on the local private sector in that part of their previous tax obligations may be shifted to investment. It was also found that Public Service Employment can be phased up quickly and expenditure can begin almost immediately. While the countercyclical benefits of this are obvious it was also noted that it is politically difficult to reduce or eliminate funding as economic conditions may warrant. The study predicts PSE will become an even larger part of fiscal stimulus. There are, however, reasons why PSE is not well-suited as a program of fiscal assistance. For example, PSE is targeted at individuals of a locality rather than the locality itself. Further, the "spreading" effect (the leakage of money from a distressed area) adversely affects the goals of the program. The author concludes by suggesting it may be better to have one training program focused on the unemployed and disadvantaged and another fiscal program focused on distressed jurisdictions rather than having a single program attempting to do both.

XI-2. *Title:* The Effect of Federal Countercyclical Policies on Regional Economies
Author: Vernon L. Fahle
Date: December 1977 *Pp.:* 33 *NTIS:* PB 275 398 *Price Code:* A03

Purpose: To determine whether regional differences in secular growth warrant additional research into the relationship between Federal countercyclical policy and regional cyclical behavior.

Method: Includes both a review of the literature on regional cycles and an empirical analysis of the cyclical behavior of counties with respect to changes in Federal economic policy. The sample of 106 counties was divided into two groups: higher growth regions and slower growth regions. Counties which grew equal to or less than the mean growth rate for the period 1965 to 1974 were classified as slow growth regions; those above the mean were assigned to the faster growth category.

The cyclical behavior of these two groups was compared with each other and related to Federal policy. The data used for this study were obtained from the U.S. Bureau of Economic Analysis.

Findings: There are differences in the economic cycles of counties which appear to be associated with their secular growth rates. Faster-growing regions respond more quickly than slower-growing regions to expansionary policies and less rapidly to contractionary policies. More research on this relationship is warranted.

XI-3. *Title:* The U.S. Economy, 1978–1982
Authors: Herman Kahn, Irving Leveson, and Jimmy Wayne Wheeler
Organization: Hudson Institute
Date: May 1978 *Pp.:* 70 *NTIS:* PB 299 482 *Price Code:* A04

Purpose: To examine the issues facing the U.S. economy from 1978 to 1982.

Method: Some of the themes discussed are: social limits to growth, inflation issues, economic prospects and scenarios 1978–1982, the international economy, structural changes in the U.S. economy, and theories of secular cycles (e.g., Kondratief and Kuznets cycles). These themes are elaborated upon in an outline format. Most of the data are taken from Federal sources.

Findings: Anti-technology, anti-economic development, and regulatory attitudes ("Health and Safety Fascism") are imposing limits to economic growth. This anti-growth mentality, together with inflation, government regulation, and international instability make the economy far more fragile than in the past.

Some "Do's" for economic policy include: slowing the rate of growth of the money supply, deregulating oil and gas, removing unreasonable environmental restrictions, giving business tax relief, cutting exise taxes to reduce inflation, and indexing the personal income tax to prevent the unplanned growth of government.

XI-4. *Title:* Countercyclical Revenue Sharing
Author: John P. Ross
Date: June 1978 *Pp.:* 45

Draft copy available from Economic Research Division, EDA, while supply lasts.

Purpose: To review the purpose, operation, and impacts of the Anti-Recession Fiscal Assistance program (countercyclical revenue sharing), with special emphasis on its effects on large cities.

Method: Begins with a review of the legislative purpose, as described in two reports prepared by the sub-committee on Countercyclical Assistance of the Committee on Intergovernmental Relations. The program's functional aspect is explored by an examination of the authorization language and history. These indicate the operational focus, success, and failures of the program. Detailed statistics are given on actual allocations to States and cities to show potential program impact. Finally, the program's impact is gauged against two criteria: (1) purpose (degree to which program brings local economic stabilization and interregional balance in terms of employment); and (2) effectiveness (degree to which above goals are achieved). To measure purpose, the author uses the concept of fiscal leverage, a fiscal performance index. Also, the paper estimates the impact of inflation and recession on State and local revenues to see if funds allocated were truly countercyclical. A review of findings from other studies is employed to determine effectiveness.

Findings: The dual purposes of this program-cushioning areas against recessionary impacts and making local areas the agents of recovery-conflict once recovery is underway. This conflict arises from the method of targeting funds on the basis of unemployment rates. This method is not able to distinguish structural and cyclical employment problems. Hence, the program has tended to supply funds to large declining cities. This approach is not effective as a "countercyclical" measure once recovery begins. As a substitute, Congress could increase the large-city set-aside in the General Revenue Sharing program once the national unemployment rate declines.

XI-5. *Title:* Public Works as a Countercyclical Device: A Review of the Issues
Author: Roger J. Vaughan
Organization: Rand Corporation
Date: July 1976 *Pp.:* 114 *NTIS:* PB 257 064 *Price Code:* A06

Purpose: To define the theoretical, empirical and policy issues associated with the development and implementation of a program of countercyclical public works. Also summarizes what is known about these issues and provides a framework for empirical work in this area.

Method: Examines issues connected with the use of public works projects as countercyclical tools. Identifies and describes business cycles in their regional and sectoral dimensions. Also discusses problems of financing public works programs, estimating their direct and indirect short-run and long-run employment effects and measuring their effectiveness vis-a-vis alternate countercyclical measures. Numerous practical implementation questions are also discussed.

Data from the U.S. Department of Labor and numerous other sources, as well as theoretical studies by other researchers are utilized. An appendix contains a comparison of the economic impacts of government spending with alternate methods of expenditure finance.

Findings: Countercyclical public works expenditures, as an alternative to other stabilizing instruments, offer the advantage of regional targeting. In several other respects, however, countercyclical public works are the least desirable alternative. They are discretionary; they are slow to start-up and stop; they may increase tax burdens during recoveries; and they may be substituted by localities for projects which would otherwise have been undertaken.

As a countercyclical tool the main goal of public works construction should be to create facilities which will efficiently provide a flow of services to the public. But those projects which are most efficient may not generate the largest increases in employment. Public works may also induce inefficient migration between regions, or may not provide employment to low income groups.

Because regions differ in their responses to national business cycles regarding timing, amplitude and consistency, programs of public works must be finely tailored to individual regions.

Public works normally produce no serious materials bottlenecks when used countercyclically because durable goods — a key input — tend to exhibit strong positive cyclical amplitude and lead the national cycle. But, to the extent that public works lure workers away from more productive employments, the social cost is increased.

On average, public works produce eight temporary jobs (lasting one year) per $100,000 of expenditures, and three permanent jobs per $100,000 of in-place facility value.

XI-6. Public Works as a Countercyclical Fiscal Policy
Author: Georges Vernez
Organization: Rand Corporation
Date: April 1977 *Pp.:* 12

Draft copy available free from Economic Research Division, EDA, while supply lasts.

Purposes: To assess the job-creation effects (both total and distributional) of alternative public works investments. The study also identifies factors that might improve the design of a countercyclical public works program.

Method: Estimates provided by econometric studies (both Federal and private) are used to assess the impact of various types of countercyclical programs. Estimates are also provided on the legislative response time required to enact the various fiscal measures.

Findings: A personal income tax has the least job-creating effect of any countercyclical fiscal policy while public service employment has the largest effect. For public service employment to be most effective, the displacement effect (any reduction of State and local government expenditures due to the availability of Federal funds) must be minimized. The study also discovered a significant lag between the time an economy enters a recession and the legislative response to implement countercyclical funds. Executive stand-by authority may be necessary to alleviate this problem. A public works program is not considered inflationary because probable program magnitudes fall far below the levels required to create excess labor demand in the major supplying industries. With respect to the distributional effects of a public works program, wide variations in employment cycles exist among States and localities during any given national cycle. Further, the response of a specific State or locality often differs widely from one national cycle to another. No single program can be expected to target effectively on all regions, industries and specific groups in the labor force.

XI-7. *Title:* Assessment of Countercyclical Public Works and Public Service Employment Programs
Authors: Georges Vernez and Roger Vaughan
Organization: Rand Corporation
Date: September 1978 *Pp.:* 161 *NTIS:* PB 297 956 *Price Code:* A08

Purpose: To assess the effects and relative efficacy of countercyclical public works and public service employment programs.

Method: The scope and history of countercyclical public works and public service employment are discussed. The effects of these programs on job creation, cyclical unemployment, substitution and displacement are compared. In addition, the distribution and program effects, value of services, effects on participants and supply constraints of both programs are studied.

Available studies of the impact and evaluation of countercyclical public works and public service employment are utilized. In addition, data from the Bureau of Labor Statistics, Bureau of the Census and the *Employment and Training Report of the President* are utilized.

Findings: Neither public works nor public service employment programs have a demonstrable advantage in terms of net job creation. Countercyclical public service employment programs, however, create jobs faster than public works programs. A main cause of delay is legislative enactment. Public works projects are concentrated in industries that experience relatively large cyclical amplitudes, whereas public service jobs are located in the State and local public sectors where this high cyclical amplitude is not experienced. The value of services provided by both programs will be greater: 1) the more efficient the use of inputs in production; 2) the lower the substitution of inputs; and 3) the greater the demand for the services provided.

The long-run productivity benefits for participants in either program appear to be negligible. Most people leaving public service employment have gone to government rather than the private sector. Finally, there is no evidence that either program has put inflationary pressures on wages or prices.

Countercyclical public works and public service employment show little stimulative effect on the economy in general.

Future research should be in the areas of: measurement and projection of local countercyclical needs and effects of countercyclical programs.

XI-8. *Title:* Regional Cycles and Employment Effects of Public Works Investments
Authors: Georges Vernez, Roger Vaughan, Burke Burright, Sinclair Coleman
Organization: Rand Corporation
Date: January 1977 *Pp.:* 405 *NTIS:* PB 264 669 *Price Code:* A18

Purpose: To identify potential improvements in the design of countercyclical public works programs. Also seeks to formulate an agenda of research on countercyclical policy.

Method: Describes the timing, duration, amplitude, and severity of cycles in employment levels in all States and 149 labor market areas (LMA's) during each of the five post-1960 business cycles. Also provides estimates of the direct, indirect, and total employment effects of 22 types of public works projects. Identifies those major supplying industries in which bottlenecks might arise and the corresponding levels of expenditures. Finally, assesses the extent to which countercyclical public works investments would provide employment opportunities for the cyclically unemployed.

Findings: The effects of national business cycles on local employment cycles vary widely among States and LMA's. There are also wide variations in the cyclical behavior of each State and labor market area from one cycle to another. Past experience in the timing of local cycles at downturns and upturns of national cycles is an inadequate guide to the timing of local cycles in future national cycles. For now, timing of countercyclical investments may best be achieved by systematic monitoring of monthly total and sectoral employment time-series data. Further research is needed on the identification of leading indicators or the determinants of variations in the timing of local cycles.

Countercyclical public works investments can be effective in creating employment in those industries and labor force categories most affected by cyclical unemployment. However, to provide employment opportunities to the young, who are more affected by cyclical unemployment than are older workers, some other countercyclical program is likely to be more effective. Also, public works may be inferior to public service employment programs in serving local cyclical needs.

With an appropriate mix of projects, a countercyclical public works program of the magnitude typically discussed in Congress is unlikely to impose excess labor demand on major supplying industries or on the construction industry. Thus, inflationary pressures are not likely to increase.

XII. Structural Unemployment

Structural unemployment may occur when fundamental changes in the economy result in an excess supply of skilled workers in declining industries or areas. Structural unemployment may also result from an influx of labor force participants who have fewer skills than available jobs require. When workers lack required skills and cannot obtain them readily, they may become chronically unemployed. Discrimination contributes to labor market rigidities which exacerbate the unemployment problems faced by many groups. Policy responses may include retraining and affirmative action together with local development assistance.

EDA research in this area has documented trends in inequality, particularly in terms of employment and income between whites and blacks, highlighted the need for encouraging minority entrepreneurship, and studied the problems and potential of vocational education as a development tool.

XII-1. *Title:* Relating Jobs to Training: A Model To Improve Congruence of Vocational Education and Current Job Practices
Author: Krishan K. Paul
Organization: The Urban Observatory of Metropolitan Nashville and University Centers
Date: December 1976 *Pp.:* 54 *NTIS:* PB 270 414 *Price Code:* A04

Purpose: Explains the working of the Relating Jobs to Training (RJT) Model. The RJT is intended to aid in the development of a systematic and continuous interface between vocational educators and employers, in order to more closely match vocational training programs to local employment needs.

Method: The model includes the means to identify both the needs of employers and potential employees. For the employer, inputs into the model are employment projections, State and local economic plans, and employer surveys. For the potential employees, inputs are assessments of schools and training programs, samples of youths and adults seeking employment and surveys of potential employees. The result is a compilation of employee needs. The model uses these two results to identify the skill training, career information, and guidance and counseling which are necessary to produce employable graduates from training programs.

Findings: The biggest problem in current vocational education and training programs is the lack of contact between program administrators and prospective employers. Consequently, program graduates are often ill-suited to meet local needs. The RJT Model is intended to act as an interface between these two groups, making for a better match between jobs and those equipped to perform them.

XII-2. *Title:* What Happens After Training: A Review of Follow-Up of Vocational Graduates
Author: Krishan K. Paul
Organization: The Urban Observatory of Metropolitan Nashville and University Centers
Date: September 30, 1976 *Pp.:* 41 *NTIS:*PB 259 429 *Price Code:* A03

Purpose: To assess the scope and content of follow-up evaluations of vocational education graduates. The study also examines the issues and trends in evaluation of vocational education programs and their implications for human resource development.

Method: Reviews and categorizes the evaluation literature on vocational-education graduates into four types of follow-up studies. Studies are divided into: (1) administrative reports, (2) comparative studies, (3) cost-benefit analyses, and (4) process studies related to the development of technology, instrumentation, data systems, methodologies, and guides and manuals. Data taken from these studies are reported and evaluated. A bibliography of 36 studies is also included as are sample questionnaires sent to graduates and employers.

Findings: Follow-up evaluation of graduates is difficult due to the very decentralized nature of vocational education in the United States. Procedural as well as conceptual difficulties exist in all follow-up studies. Since vocational education affects billions of dollars and millions of people, an urgent need exists to encourage and sponsor more research effort at the State, regional and national levels.

XII-3. *Title:* Minority Business Enterprise Capital Markets: An Analysis of Empirical Data, Current Federal Intervention and Proposed Innovations
Authors: Belden Daniels, Derek "Pete" Hansen and Larry Litvak
Organization: Harvard University
Date: September 1978 *Pp.:* 69 *NTIS:* PB 297 670 *Price Code:* A04

Purpose: To explore the minority business "capital gap": what it is, why it exists, and how to alleviate it.

Method: The first section reviews the key literature on Minority Business Enterprise (MBE) finance and the limited empirical data. An annotated bibliography is attached. The next section assesses the capacity of existing institutions to alleviate the MBE "capital gap."

Findings: There is a capital market imperfection for those MBEs that supply goods and services to the majority market. This capital market failure has denied otherwise profitable MBEs access to adequate capital. For efficiency and equity reasons, these capital market imperfections need to be corrected.

An experimental pilot program to provide front-end capital support for a select number of Minority Investment Companies is proposed. This program would provide equity, subordinated debt, and long-term development loans to minority enterprises. This proposal differs from the existing program in that no government loans to investment companies would be made. Rather, subordinated loans would be made that could be converted into an equity grant if targets were met for employment, sales, employment of minorities and location of the firm.

XII-4. *Title:* Economic Growth and Minority Entrepreneurship
Author: Douglas P. Detterweich, James H. Sills, Jr., and Francis X. Tannian
Organization: University of Delaware
Date: June 1977 *Pp.:* 103 *NTIS:*PB 273 495 *Price Code:* A06

Purpose: Attempts to identify firms in New Castle County, Delaware in which minority entrepreneurs could reasonable expect to gain future entry with moderate capital and technical knowledge.

Method: To identify and analyze growth and potential growth industries in the county, the authors consider seven industrial sectors which potential entrepreneurs could enter: construction; manufacturing; transportation and public utilities; wholesale trade; retail trade; finance, insurance and real estate; selected services. These sectors are identified from data on high-growth industry entries and exits and on specific county firms in high-growth sectors, showing growth in firm sales and employment, locations of firms, firms' performance over business cycles, etc. Specific firms are surveyed to gather information on attitudes towards minority entry. The study mainly uses data from County Business Patterns, the Delaware Department of Labor, and surveys.

Findings: Sub-sectors within the seven selected industry sectors are identified as having potential for minority entrepreneurship. The survey information shows key characteristics and problems of the firms surveyed.

The study concludes with a group of recommendations, mainly directed to the State, on how minority entrepreneurs can be assisted. The recommendations include establishing minority entrepreneurship programs and goals, helping to disseminate the findings of this study, increasing the flows of private capital and expertise to minority business activities, etc.

XII-5. *Title:* Inequality in America: Research and Policy Perspective on Race, Sex and Urban Development
Author: Joan G. Haworth and David W. Rasmussen, editors
Organization: Florida State University
Date: March 1976 *Pp.:* 183 *NTIS:* PB 257 152 *Price Code:* A09

Purpose: This volume presents the proceedings of a conference held in Atlanta, Georgia in May 1975, organized to explore the subject of employment inequality and economic development in the United States.

Method: In this edited version, conference papers are presented on earnings, productivity, and changes in employment discrimination during the sixties and urban agglomeration economics and national urban policy. Participants represented Florida State University, Auburn University, Florida State government, the Council of Economic Advisors, and the Urban Institute.

Findings: Success in reducing racial and sexual employment discrimination has been limited. Over the ten-year period 1960–1970, the nonwhite-white earnings ratio increased 17.4 percent for males and 34 percent for females. In the same period, however, the median income of women was dropping relative to men.

The reasons for these changes vary. For males, the key was worker characteristics. Nonwhite males entering the labor force tended to be younger and better educated, having high relative earnings. Nonwhite males exiting were older, with low relative earnings. For females entering, white women were primarily married and middle-aged. Entering nonwhite women had fewer marital constraints on their earnings capacity and obtained jobs in the urban north. For the latter group, these characteristics led to higher incomes.

Minorities and women frequently lose their positions in seniority queues, or lose their jobs or grow discouraged in seeking jobs, during economic downturns. Thus, full employment policies help these groups.

Economic inequality exhibits distinct spatial configurations: poverty is more pronounced in small urban centers than large urban centers. Income differences among cities of different sizes are due to agglomeration economies of three types: (a) economies of scale in consumption; (b) externalities in production; and (c) opportunities for upward mobility of disadvantaged groups. Empirical work suggests that agglomeration gains are frequently exaggerated.

Note: Earlier documents and working papers completed for this project include:

1. *Changes in the Relative Economic Status of Nonwhite Males During the 1960's, Vol. I. NTIS:* COM-75-10623, 53 pp., *Price Code:* A04.
2. *Changes in the Relative Economic Status of Nonwhite Males During the 1960's, Vol. II. NTIS:* COM-75-10624, 77 pp., *Price Code:* A05.
3. *Changes in the Relative Economic Status of Women from 1960 to 1970, NTIS:* PB 257 772, 103 pp., *Price Code:* A06.
4. *Differential Impact of Economic Growth on Minority Groups, NTIS:* COM-75-10610, 129 pp., *Price Code:* A07.
5. *The Earnings Status of Urban Minorities, NTIS:* COM-75-10627, 30 pp., *Price Code:* A03.
6. *The Economic Status of Urban Mexican-Americans, NTIS:* COM-74-11651, 23 pp., *Price Code:* A03.
7. *The Economic Status of Urban Minorities, NTIS:* COM-74-11646, 26 pp., *Price Code:* A03.
8. *The Egalitarian Effects of Economic Growth, NTIS:* COM-75-10628, 21 pp., *Price Code:* A02.
9. *The Redistributive Effects of Urban Population Growth, NTIS:* PB 256 637, 26 pp., *Price Code:* A03.
10. *Urban Agglomeration Economies and Their Implications for Regional Development Policy, NTIS:* COM-75-10629, 50 pp., *Price Code:* A03.
11. *Variation in Minority Business Participation, NTIS:* PB 256 638, 18 pp., *Price Code:* A02.

XIII. Natural Disasters

When a natural disaster strikes, damage assessment, relief assistance, and damage containment actions may be taken. Relief assistance may be in the form of provision of goods and services, grant or loan assistance, or the funding of public works projects. Damage containment may involve public works projects also, as well as the relocation of potential victims. The success of all such efforts, as well as the prevention of natural disasters, requires careful planning, based on a knowledge of past experiences.

The single study in this section lists the components of effective management of droughts—a form of disaster whose almost uniquely slow development lends itself to thorough relief planning. Dealing with more common sudden natural disasters and aiding their human and business victims in the most effective way are not issues of high national priority until one strikes. Appropriate contingency planning for such unpredictable but recurring events as floods, tropical storms and earthquakes would assure more beneficial assistance when it becomes needed.

XIII-1. *Title:* Managing Resource Scarcity: Lessons from the Mid-Seventies Drought
Author: Phillip Burgess and Craig Liske, eds.
Organization: Western Governors' Policy Office for Policy Research (WESTPO)
Date: August 1978 *Pp.:* 89 *NTIS:* PB 297 627 *Price Code:* A05

Purpose: To gain a clearer understanding of policy responses necessitated by a drought and to delineate specific policy options available to various levels of government.

Method: Several areas of drought management are distinguished and discussed. These include: (1) drought impacts and research needs; (2) Federal and State adjustment policies and programs; (3) drought and emergency preparedness; and (4) research needs and utilization. The summary of a workshop on drought management is included.

Findings: Droughts are "creeping phenomena" that involve great uncertainty and pose formidable management problems. Effective drought management requires preventive measures, forecasting capabilities and contingency plans for mobilizing needed resources for mitigation, relief, and recovery operations. The issues involved in drought management include a high level of research, communication, technological issues, public health and safety, weather modification and forecast technology, and ecosystem and ecological issues.

XIV. Public Infrastructure

The development and maintenance of public capital facilities is an economic activity essential to the quality of life, health, and safety of citizens and to local and area economic development. Urban and rural areas alike share in the need to constantly generate new facilities and to renovate and maintain older ones. Crucial concerns in the development of public infrastructure include financing, timing, and the effects of governmental regulations on the building and operation of such facilities.

Recent EDA research in this area consists of an inventory of municipal wastewater systems in the United States and a study of the development effects of rural water systems.

XIV-1. *Title:* Report on Municipal and Industrial Wastewater Treatment Systems: A Statistical Compendium
Author: George Reid, Ralph Martin, and J. Gordon Pulliam
Organization: University of Oklahoma and Pulliam Associates
Date: June 1978
NTIS Number and *Price Code* listed below for individual reports

Purpose: To inventory municipal wastewater systems in the United States.

Method: For each city with over 2,000 population in each State listed below, the report describes the wastewater treatment facility, its design capacity and actual flow, the facility improvements underway, grant and treatment technology information, and the starting date. The National Pollutant Discharge Elimination System (NPDES) and Standard Industrial Code (SIC) numbers, average daily discharge (less than 50,000 gallons per day or greater than 50,000 only), and ownership type (public, private, etc.) are given for each facility issued an NPDES permit.

State	*NTIS*	*Price Code*
Alabama	PB 291 049	A04
Alaska	PB 291 050	A03
Arizona	PB 291 051	A03
Arkansas	PB 291 052	A03
California	PB 921 053	A05
Colorado	PB 291 054	A03
Connecticut	PB 291 055	A03
Delaware	PB 291 056	A02
Florida	PB 291 057	A04
Georgia	PB 291 058	A04
Hawaii	PB 291 059	A02
Idaho	PB 291 060	A03
Illinois	PB 291 061	A07
Indiana	PB 291 062	A05
Iowa	PB 291 063	A04
Kansas	PB 291 064	A04
Kentucky	PB 291 065	A05
Louisiana	PB 291 066	A06
Maine	PB 291 067	A03
Maryland	PB 291 068	A04
Massachusetts	PB 291 069	A03
Michigan	PB 291 070	A05
Minnesota	PB 291 071	A04
Mississippi	PB 291 072	A04
Missouri	PB 291 073	A06
Montana	PB 291 074	A03
Nebraska	PB 291 075	A04
Nevada	PB 291 076	A02
New Hampshire	PB 291 077	A03
New Jersey	PB 291 078	A04
New Mexico	PB 291 079	A03
New York	PB 291 080	A06
North Carolina	PB 291 081	A05
North Dakota	PB 291 082	A03
Ohio	PB 291 083	A09
Oklahoma	PB 291 084	A04
Oregon	PB 291 085	A03
Pennsylvania	PB 291 086	A08
Rhode Island	PB 291 087	A02
South Carolina	PB 291 088	A04
South Dakota	PB 291 089	A03
Tennessee	PB 291 090	A04
Texas	PB 291 091	A08
Utah	PB 291 092	A03
Vermont	PB 291 093	A03
Virginia	PB 291 094	A05

State	*NTIS*	*Price Code*
Washington	PB 291 095	A04
West Virginia	PB 291 096	A05
Wisconsin	PB 291 097	A05
Wyoming	PB 291 098	A03
Complete Set (50 volumes)	PB 291 048	$215.00

Each state is also available on microfiche. The price code for microfiche is A01.

Findings: N/A

XIV-2. *Title:* Impact of Rural Water Systems on Rural Economic Development
Organization: National Rural Water Association
Date: 1978 *Pp.:* 91 *NTIS:* PB 301 428 *Price Code:* A05

Purpose: To review the present issues concerning rural water systems and overall rural economic development.

Method: The study includes a literature review on the subject of rural water systems and rural economic development and an evaluation of statistical data availabilities and needs. Federal water programs are described, and Federal, State, and local requirements for water systems are examined. Two case studies of rural water programs, in Oklahoma and North Carolina, are included.

Findings: The economic impact of rural water systems on rural development remains difficult to measure due to the lack of analytic studies and adequate quantitative data concerning the problem. The case studies do, however, indicate a significant impact on rural growth patterns in rural areas. Federal, State, and local legislation have had positive and negative effects on the development of rural water systems. Financial assistance programs have been of crucial importance to rural water systems, but various regulatory actions have introduced conflicting requirements on safety, design and construction, and operational issues. The Farmers Home Administration will very likely continue to determine the development priorities for rural water systems based on the economic viability of each individual application rather than on economic development criteria.

XV. Other

XV-1. *Title:* Selected Statistics on the Developing USA
Author: Chi Ta W. Chen
Organization: Economic Development Administration
Date: May 1977 *Pp.:* 121 *NTIS:* PB 270 980 *Price Code:* A06

Purpose: To compile historical, demographic and economic indicators useful in analyzing changing U.S. economic conditions.

Method: The statistics are compiled on a State-by-State basis from as early as data availability permits to 1975. The 18 separate indicators include: State population, personal income, per capita personal income, deposits (all banks), construction employment, construction contracts awarded, farm employment, farm income, nonfarm employment, manufacturing employment, nonmanufacturing employment, expenditures for new plants and equipment, wages of production workers, total retail sales, value added by manufacture, petroleum production, coal production, and electric power production. An indicator-by-indicator portrayal is presented in the first section; a State-by-State portrayal in the second section. Included in the study is a bibliography of the data sources involving approximately two dozen publications.

Findings: N/A

XV-2. *Title:* EDA's Intern and Visiting Scholar Program: A Policy Memorandum
Organization: The Lazar Institute
Date: October 1, 1976 *Pp.:* 9
Copies available from Economic Research Division, EDA.

Purpose: To provide recommendations with respect to the future of the EDA Intern and Visiting Scholar Program.

Method: The study is based on the 1973 report of Christopher Bladen of EDA, entitled *Evaluation of EDA Research Program* and case studies of intern programs conducted by various agencies. Three specific questions are addressed: (1) the effectiveness of the EDA Intern Program, (2) whether objectives could be met through other means, and (3) the future role of the research program (OER).

Findings: The OER Intern Program has achieved substantial impact but at unnecessarily high costs. EDA should cease support for the current intern program. A system of financial compensation for interns should be replaced by one based upon academic credit incentives. This change would result in an 80% savings. OER should initiate a Fellowship Program aimed at mid-career professionals interested in the economic development field.

XV-3. *Title:* Bibliography of State-Directed Research for Economic Development, 1969-1975
Author: Marvin B. Lind
Organization: Iowa Development Commission
Date: January 1976 *Pp.:* 151 *NTIS:* PB 254 231 *Price Code:* A08

Purpose: To provide a bibliography of State-directed research on economic development published during 1969–1975.

Method: There are five sections in the bibliography: research abstracts organized by State, a directory of State development agencies, an industrial directory, a listing of State statistical abstracts, and miscellaneous publications. Classifications for research abstracts include: agriculture, forestry, fishing, econometric models, economic data and projections, energy, industrial development and natural resources, among others. The bibliography was compiled by the author under the guidance of the National Association of State Development Agencies Research Division and EDA.

Findings: N/A

XV–4. *Title:* Bibliography of State-Directed Research for Economic Development, 1971–1977
Author: Marvin B. Lind
Organization: Mid-States Research Services
Date: August 1978 *Pp.:* 174 *NTIS:* PB 297 747 *Price Code:* A08

Purpose: To serve as a "communication system for the dissemination of information on relevant (economic development) research." To assist in analyzing and developing agency programs.

Method: The project is largely a compilation of abstracts on economic development research supplied by various agencies (National Association of State Development Agencies, U.S. Travel Service, Title V Regional Commissions, and National Council for Urban Economic Development). The abstracts are categorized according to subject matter (economic data, energy, industrial development, international trade, natural resources, etc.). Each abstract includes the study's title, author and/or organization, date, pages, and summary.

Also included: a section specifying the contributing individual State agencies as well as sections updating State industrial directories and the States' statistical abstracts.

Findings: N/A

XV–5. *Title:* The Feasibility of Establishing the Southwest Center for Economic and Community Development
Author: Raymond P. Lutz and Bernard L. Weinstein
Organization: The University of Texas (Dallas)
Date: April 1977 *Pp.:* 45 *NTIS:* PB 268 228 *Price Code:* A03

Purpose: To assess the feasibility and potential role of the Southwest Center for Economic and Community Development.

Method: An overview of the economic trends in the Southwest is presented. Data from the Bureau of the Census and Sales and Marketing Management's 1976 Survey of Buying Power are used to support the analysis.

The functions and objectives, administrative structure, preliminary cost estimates, and potential sources of funding for the Southwest Center for Economic and Community Development are highlighted. The Dallas Chamber of Commerce's relationship with the center is outlined. Finally, projects to be undertaken by the center during its initial phase of operation are presented.

Findings: The Southwest has displayed rapid economic development which is likely to be accompanied by "growing pains." The Southwest Center for Economic and Community Development can fill the need of analyzing this regional change and directing the regional development via sound growth-management policies.

The economic and community development of the Dallas-Fort Worth metropolitan area will be the center's initial focus. In addition, the impact of national economic policies and legislation on the development of the Southwest will be studied by the center. Specific projects to be undertaken include: the impact of recent interregional migration on State and local governmental financing patterns in the Southwest, the impact of zoning policies on the distribution of social life, the status of women in the Southwest, and the relationship between industrial growth and industrial linkages in the Southwest.

The center will rely heavily on Federal contracts and grants for financial support. State and local governmental agencies, foundations, and corporations will also be important potential sources of funding.

Addendum

Omitted Reports, EDA Reports Published in Book Form, and Important New Reports from EDA

1. *American Indian Economic Development,* Sam Stanley, Editor. Published by Moulton Pub. and distributed by Aldine, Chicago, 1978, 595 pp.

   Compilation of papers prepared under a grant to the Smithsonian Institution. Analysis of the process of economic development as it affects American Indian communities. (Original report available from NTIS: COM-74-11486-SET; contact NTIS for price quote.)

2. *Analysis of the Business Development Program,* SYSTAN, Inc., 1974. Volume I: *A Strategy for Program Implementation* is an attempt to develop a methodology for identification of industries that are compatible with a particular EDA-designated area. NTIS: PB 259 649, 64 pp., Price Code: A04. Volume II. *Further Refinement of Subsidy Program* focuses on industrial subsidy evaluation. NTIS: PB 259 650, 77 pp., Price Code: A05.

3. *Assessing the Regional Economic Consequences of Alternative Federal Policies,* Steven Dresch, Institute for Demographic and Economic Studies, Inc., 1977. NTIS: PB 272 875, 77 pp., Price Code: A05.

   A description of IDIOM (Income Determination Input-Output Model). IDIOM is basically an interactive, inter-industry, national-regional policy evaluation model. (See also: entry V-22.)

4. *Balanced National Growth,* edited by Kevin Allen, Lexington Books, Lexington, MA, 1979, 330 pp.

   Collection of articles on European and Canadian experiences in regional economic development incentive policy and how they may be applied to U.S. policy options. (See entry II-31.)

5. *Bibliography of State-Directed Research for Economic Development, 1970-76,* Iowa Development Commission, 1977. NTIS: PB 267 771, 185 pp., Price Code: A09. Second in the series; see entries XV-3 and XV-4.

6. *Central City Economic Development,* edited by Benjamin Chinitz, Abt Books, Cambridge, MA, 1979, 187 pp. (Same as entry I-1.)

7. *A Conceptual Basis for the Study of Welfare Reform,* Dennis N. DeTray, Rand Corp., 1974. NTIS: PB 258 184, 47 pp., Price Code: A03.

   Outlines a general conceptual framework that can be used to evaluate and analyze the specific but related regional impacts of different welfare reform packages.

8. *The Declining Northeast: Demographic and Economic Analysis,* edited by Benjamin Chinitz. Praeger Pub., New York, NY, 1978, 182 pp.

   Collection of papers analyzing demographic and economic events in the Northeast in the 1970's. (See entry II-6.)

9. *Development Banking as a Mechanism for Regional Revitalization,* Martin T. Katzman, 1976. NTIS: PB 267 809, 30 pp., Price Code: A03.

   Makes recommendations on the organizational structure, lending authorities, and charter of a national development bank.

10. *Distributional Implications of Recreation-Led Growth: Appalachia.* University of North Carolina, 1975. NTIS: PB 257 660, 142 pp.

11. *The Economic Development Project: Final Report to the United States Department of Commerce.* LEGIS/50-The Center for Legislative Improvement, 1977. NTIS: PB 284 955, 44 pp., Price Code: A03.

    Summary of case studies on the role of State legislative branch in formulating economic development policies.

12. *Economic Impact of Travel and Tourism in Arkansas,* University of Arkansas, 1977. NTIS: PB 267 449, 32 pp., Price Code: A03.

13. *The Economics of Southern Growth,* edited by E. Blaine Liner and Lawrence K. Lynch, Seeman Printery, Durham, NC, 1977. 243 pp.

Compilation of studies of recent Southern growth. (Includes entries II–3, –14, –18, –21, –22, –23, and –25.)

14. *Effects of Income Maintenance on Urban Fiscal Problems,* Harvard University, 1974. NTIS: COM–75–11075, 34. pp.

15. *Effects of Journey-to-Work Commuting on the Development of Low-Income Areas,* University of Georgia, 1974. NTIS: COM–75–10746, 214 pp.

16. *Employment and Income Growth in the Southeast: Retrospect and Prospect,* University of Georgia, 1974. NTIS: COM–75–10745, 24 pp.

17. *Factor Mobility, Commodity Trade, and Regional Growth: A Review of the Literature,* Massachusetts Institute of Technology, 1977. NTIS: PB 80–151103, 90 pp., Price Code: A05.

Review of basic neoclassical theories of factor mobility and of existing regional econometric models that deal with factor and commodity mobility.

18. *Factors Affecting Career Aspirations of Employed Women,* University of North Carolina, 1975. NTIS: PB 257 662, 130 pp.

19. *Family Decisionmaking Over the Life Cycle: Some Implications for Estimating the Effects of Income Maintenance Programs,* James P. Smith, Rand Corp., 1973.

A theoretical model is used to predict and analyze the expected labor supply effects of a Family Assistance Plan (FAP).

20. *Fiscal Crisis in American Cities: The Federal Response,* edited by L. Kenneth Hubbell. Published by Ballinger Pub. Co., Cambridge, MA, 1979. 350 pp.

Compilation of final versions of papers presented at EDA-sponsored seminar on this subject. (See entries: I–2, –6, –12; IV–1, –2, –4; and XI–1, –4, and –6.)

21. *The Future of the U.S. and Its Regions: National Trends and Influences,* Hudson Institute, 1977. NTIS: PB 265 144, 380 pp.

Statistical and analytical work.

22. *Guide to County Census Data for Planning Economic Development,* U.S. Bureau of the Census, 1979. NTIS: PB 300 768, 115 pp., Price Code: A06.

23. *Handbook for Community Economic Development,* Syyed T. Mahmood and Amit K. Ghosh, Community Research Group. NTIS: PB 80–147903, 334 pp., Price Code: A15.

"How to" for community economic development.

24. *Implications of Growth in the Service Economy for Regional Economic Development and Planning,* Jack Faucett Associates, 1975, NTIS: COM–75–10611, 254 pp., price Code: A12.

Analysis of service industries for economic development uses. Services may be able to assist areas through import substitution but not act as any catalyst for general development.

25. *The Industrial Revenue Bond as a Financial Attraction Device,* Institute of International Law and Economic Development, 1978. NTIS: PB 292 275, 321 pp. Price Code: A14. Literature review also available: PB 80–142060, 262 pp., Price Code: A12.

Analysis of industrial revenue bonds among financial incentive instruments for economic development: uses, authorities, role.

26. *Jobs and Earnings for State Citizens: Monitoring the Outcomes of State Economic Development and Employment and Training Programs,* Richard E. Winnie, Harry P. Hatry and Virginia B. Wright, The Urban Institute. NTIS: PB 273 698, 159 pp., Price Code: A08.

Develops and discusses impact measures of economic and manpower activities of State government.

27. *Labor Supply and the Value of the Housewife's Time,* John F. Cogan, Rand Corp., 1975. NTIS: PB 258 183, 56 pp., Price Code: A04.

Several alternative procedures for estimating the value of the nonworking married woman's time are examined and compared.

28. *Local Economic Development,* Curtis H. Martin and Robert A. Leone, Lexington Books, Lexington, MA, 1977, 132 pp. (Grant was to the National Bureau of Economic Research; original report entitled *Analysis of Federal Economic Development Programs* available from NTIS: PB 262 773, 330 pp., Price Code: A15.)

Analysis of Federal efforts to stimulate regional growth in the context of their legislative and intellectual histories and in light of changing national economic development objectives. Contains history of EDA.

29. *Manufacturing Plant Characteristics, 1970,* U.S. Bureau of the Census, 1973. NTIS: COM–73–90034, 465 pp.

Survey to identify the locational and operating characteristics of plants in operation in 1970. See also: entry VI–3, a companion survey.

30. *Migration and Economic Change in Predominately Black Counties, 1970–1974,* William L. Henderson, 1976. NTIS: PB 298 878, 207 pp., Price Code: A10.

Review paper on economic conditions in 100 counties in the South.

31. *Multiregional Multipliers for Massachusetts and New England,* Massachusetts Institute of Technology, 1977. NTIS: PB 80–158082, 41 pp., Price Code: A03.

    A general description of the MRIO (Multiregional Input-Output Model) and an interpretation of the multiplier with the MRIO framework.

32. "New Directions in Federal Economic Development Programs," published in *Explorations in Economic Research,* Occasional Papers of the National Bureau of Economic Research, v. 4, no. 3, Summer 1977. NTIS: PB 80–152887, 134 pp., Price Code: A07.

    Papers presented at Conference on New Directions in Federal Economic Development, Williamsburg, VA, November 30–December 1, 1973.

33. *On Hirschman, Linkages and Empirical Results,* Massachusetts Institute of Technology, 1977. NTIS: PB 80–150915, 23 pp., Price Code: A02.

    An empirical test of Hirschman's unbalanced growth hypothesis is reviewed.

34. *Preliminary Listing of Municipal Water Supply Capacities,* Oklahoma Foundation for Research and Development Utilization, Inc., 1976. NTIS: PB 259 495, 234 pp., Price Code: A11.

    Data on water supply capacities in all U.S. communities with a serviced population of over 2,000.

35. *Regional Impacts of Rising Energy Prices,* William K. Miernyk, Frank Giarratani, and Charles F. Socher. Ballinger Pub. Co., Cambridge, MA, 1978, 108 pp.

    Collection of related essays which examine the effects of rising energy prices from several different approaches. (Same as entry IX–6.)

36. *Southern Regional Research and Information Program,* Southern Growth Policies Board, 1978, NTIS: PB 283 898, 124 pp., Price Code: A06.

    Constructs an economic development research strategy for the South.

37. *What Should America's Housing Policy Be?* Harvard University, 1974. NTIS: COM–74–11653, 42 pp.

    Discussion of U.S. housing policy.

FY 1979 Research Grants

Classification/Subject	*Grantee*	*Anticipated Due Date*
I. Urban		
1. "Economic Transformation in Selected American Cities: A Study of Processes with Implications for Development Policy" (Applied)	Columbia University	12/28/80
2. Transfer of funds for performing research and dissemination tasks in selected cities of the Commerce/Cities Project (Applied)	U.S. Bureau of the Census	12/1/80
3. Research for an "Independent Analysis of New York City's Long-Term Policies" (Applied)	Center for New York City Affairs	11/2/80
4. Prepare research papers on priority issues in urban economic development and develop strategies on selected priority topics identified in those papers (Applied)	Public Technology, Inc.	8/9/80
5. Research on the effects of environmental conditions and environmental policies on the geographical distributions and levels of economic activity within and among urban areas. (Applied)	The Urban Institute	5/16/80
6. Research on critical determinants of urban economic distress (Applied)	The Urban Institute	12/1/80
7. Supplemental funding to complete FY 78 "Indicators for Local Economic Development" (State-of-the-art)	National League of Cities	8/6/79
8. Research on data inventory for urban economic development (State-of-the-art)	National League of Cities	11/14/80
9. Conference for exploring issues and problems of urban economic development for the State of Kentucky's urban centers and to plan for their growth (State-of-the-art)	(Kentucky) Governor's Economic Development Commission and Kentucky Development Cabinet	11/2/79
II. Regional		
1. "Migration and Industrial Location: Their Interaction in Small Regional Economies" (Basic)	Arizona State University (Greenwood)	8/31/80
2. Transfer for Continuous Work History Sample (CWHS) for expanded data base (Basic)	U.S. Bureau of Economic Analysis	12/31/80

Classification/Subject	*Grantee*	*Anticipated Due Date*
3. "Long-Run Trends, Determinants, and Policy Implications Related to Regional Economic Development" (Basic)	University of Oklahoma (Hibdon)	12/28/80
4. "Economic Impact of the Program of the Economic Development Administration" (Applied)	University of South Carolina (Martin)	4/8/80
5. To complete project and prepare final report on "Private Investment, Public Policy, and the Decline of Older Regions: An Analysis of the New England Economy" (Applied)	Harvard University (Harrison)	4/31/80
6. To complete report on Northeastern States and to perform background research in preparation for forming an alliance between business, government, and labor (Applied)	Coalition of Northeastern Governors' Policy Research Center, Inc. (CONEG)	7/15/79
7. Research on business-labor cooperation component of the Northeast Economic Development Strategy of CONEG (Applied)	CONEG	3/28/80
8. To conduct three research and dissemination projects: 1) research on infrastructure needs in the region; 2) extension of research for leadership in local and regional economic development activities; and 3) research on impact of the Multilateral Trade Adjustments (Applied)	Northeast-Midwest Institute	10/5/80
9. To complete research on Phase I of "The Southern Index" (Applied)	Southern Growth Policies Board	12/30/79
10. Phase II of "The Southern Index" (Applied)	Southern Growth Policies Board	3/28/81
11. Establish and operate a system for "Policy Research Information Management and Evaluation" (Applied)	Western Governors' Policy Office (WESTPO)	12/28/80
12. Arrangements and background papers for the U.S. visit of the OECD Working Party on Regional Development (State-of-the-art)	Academy for Contemporary Problems	7/30/80
13. Supplemental funding to assist OECD Working Party on Regional Development to undertake a research seminar (State-of-the-art)	Academy for Contemporary Problems	12/31/80

III. Rural

To "Identify and Conceptualize Elements for a Rural Economic Development Policy" (State-of-the-art)	National Rural Center	11/15/80

IV. Fiscal

1. "A Study of the Impact of Tax Incentives on Economic Development" (Applied)	UDI Associates	7/1/81
2. To conduct "A Study of the Fiscal Benefits of Adaptive Use and Historic Preservation" (Applied)	Stephens Associates	6/26/79

Classification/Subject	Grantee	Anticipated Due Date
	V. Development Planning	
1. Background study and design a prototype economic impact analysis, reporting and evaluation system containing a model economic impact statement (Basic)	Economica, Inc.	1/31/80
2. To complete a study of "Planning for Regional Economic Development" (Basic)	Massachusetts Institute of Technology (Polenske)	3/22/80
3. To perform additional tasks related to "Planning for Regional Economic Development" (Basic)	MIT (Polenske)	3/22/80
4. "Development of the Interregional Model" (Basic)	Jack Faucett Associates	12/31/80
5. Transfer of funds for participation in Interagency Domestic Information Display System Project (DIDS) (Basic)	NASA—DIDS Project	9/30/79
6. To demonstrate in the Southern Alleghenies Economic Development District how a geographically detailed multicounty data base can be developed and used to guide public investment decisions (Applied)	International Data and Development, Inc.	12/19/80
7. Sponsor a series of workshops and prepare research papers on strengthening the States' role in economic and community development and business finance (Applied)	National Council for Urban Economic Development (CUED)	3/31/80
8. To complete a study on the role of the arts on economic development, employment, tourism and industrial location (Applied)	New England Foundation for the Arts, Inc.	2/1/80
9. Supplemental funding to provide for a wider, more effective dissemination of research findings under the present grant, "State Economic Policy Formulation" (Applied)	Council of State Planning Agencies (CSPA)	1/31/80
10. Additional research, dissemination, and staff advisory activities focused on strengthening the States' role in subnational economic development (Applied)	CSPA	9/1/80
11. Formulate a "Handbook for Regional Economic Development" (State-of-the-art)	National Educational Institute for Economic Development (NEIED)	3/31/81
12. Continued assistance for producing the series "State Quarterly Economic Developments" (State-of-the-art)	U.S. Bureau of Economic Analysis	12/30/79
13. "Western Regional Conference to Strengthen Economic Development Through State and Resource-Sharing" (State-of-the-art)	Western Interstate Commission for Higher Education (WICHE)	9/26/80
	VI. Business Development	
1. Research on "Firm Behavior as a Determinant of Economic Change" (Basic)	Massachusetts Institute of Technology (Birch)	4/30/80

Classification/Subject	*Grantee*	*Anticipated Due Date*
2. Work on how EDA's business development program can be more effectively used to promote permanent jobs in distressed areas (Applied)	Reid H. Ewing	3/31/80
3. An analysis of the revised proposal for a National Development Bank to be housed in an expanded EDA Business Development Program (Applied)	Belden H. Daniels	8/30/79
4. "A Three-Part Study Investigating the Roles of Small Firms and Certain Kinds of Mature Firms in Domestic Economic Development" (Applied)	National Rural Center (Daniels)	12/28/80
5. A review of public sector business assistance programs (Applied)	Margaret E. Comes	7/30/79
6. Prepare report analyzing business involvement in local economic development in both headquarters and branch plant communities (State-of-the-art)	Conference Board	12/28/80
7. To assess and classify the market demand for EDA's expanded business finance program and to help design an appropriate delivery system (State-of-the-art)	Donald I. Kane Associates	1/15/80
8. Analysis of policy implications of government assistance for the financing of new, small firms (State-of-the-art)	Charles T. Haworth	2/28/80
9. To sponsor several conferences on development financing issues, commission and distribute research papers on said issues, and prepare for distribution proceedings of each conference (State-of-the-art)	Corporation for Public/Private Ventures	12/28/80
10. To produce a series of short option/issue papers on business finance to achieve local economic development (State-of-the-art)	The Urban Institute	8/29/80

VII. Sectoral Analysis

Classification/Subject	*Grantee*	*Anticipated Due Date*
1. "Sectoral Analysis of U.S. Earnings Growth: With Implications for Minority Development" (Basic)	American University	12/1/80
2. A series of issue papers on economic adjustment (State-of-the-art)	Margaret E. Comes	11/31/79

VIII. Regulation

Classification/Subject	*Grantee*	*Anticipated Due Date*
Prepare and publish a summary/analysis of LEGIS/50's private sector seminar on governmental regulation (State-of-the-art)	LEGIS/50-Center for Legislative Improvement	10/28/79

IX. Natural Resources

Classification/Subject	*Grantee*	*Anticipated Due Date*
1. Transfer of funds to U.S. Corps of Engineers for their work on High Plains Project (Applied)	U.S. Army Corps of Engineers	8/31/79
2. Transfer of funds for High Plains Project contract (Applied)	Camp, Dresser & McKee	3/31/82

Classification/Subject	Grantee	Anticipated Due Date
3. Air Quality-Water Project (Applied)	Boston, MA	5/30/81
4. Air Quality-Water Project (Applied)	Buffalo, NY	5/31/81
5. Air Quality-Water Project (Applied)	Chicago, IL	5/31/81
6. Air Quality-Water Project (Applied)	Elizabeth, NJ	5/31/81
7. Air Quality-Water Project (Applied)	St. Paul-Minneapolis, MN	5/31/81
8. Air Quality-Water Project (Applied)	Philadelphia, PA	5/31/81
9. Air Quality-Water Project (Applied)	Portland, OR	5/31/81
10. Air Quality-Water Project (Applied)	Waterbury, CT	5/31/81
11. Supplemental funding to provide for the organization of an Energy Congress and to prepare and disseminate a "New England Blueprint for Energy Action" (State-of-the-art)	Tufts University	6/30/79

X. Rapid Growth/Boom Towns

XI. Cyclical Unemployment

Classification/Subject	Grantee	Anticipated Due Date
"A Preliminary Study of Trigger Formulas for Public Works Expenditures" (Applied)	Rutgers University, Center for International Business Cycle Research (Moore)	12/30/79

XII. Structural Unemployment

Classification/Subject	Grantee	Anticipated Due Date
1. "The Effect of Growth on Underemployment and Poverty in American Cities" (Applied)	National Economic Research Institute	12/28/80
2. "Targeting on the Unemployed" (Applied)	University of Texas at Austin (Salinas)	12/1/80
3. Supplemental funding for "Targeting on the Unemployed" (Applied)	University of Texas at Austin (Salinas)	12/1/80
4. Background study of "Program Exhibiting Manpower and Economic Development Linkages, Impact Analysis, Reporting and Evaluation System—Containing a Model Economic Impact Statement" (State-of-the-art)	Anne L. Gould	10/8/79

XIII. Natural Disasters

XIV. Public Infrastructure

Classification/Subject	Grantee	Anticipated Due Date
1. Prepare a study design on capital infrastructure needs of the New York Region over the next decade (Basic)	Regional Plan Association of New York	3/28/80
2. Paper on "History of Public Works in America, 1790 to 1970" (Basic)	Mark Aldrich	12/1/80
3. Assistance for water sewer development in low income rural areas (Applied)	National Demonstration Water Project, Inc.	10/23/80

	Classification/Subject	Grantee	Anticipated Due Date
	XV. Other (e.g., Training)		
1.	Regional Science Association's Sixth Annual Dissertation Competition (Basic)	Regional Science Association	8/29/80
2.	Supplemental funding to conduct a set of 8 regional seminars concerned with more effective utilization of the *Handbook for Evaluating Economic Development* (State-of-the-art)	American Industrial Development Council/Education Foundation *(AIDC/EF)*	5/29/80
3.	To provide comprehensive training in the field of business development and finance and program evaluation to nonmetropolitan development organizations' professional and support staffs (State-of-the-art)	National Educational Institute for Economic Development (NEIED)	12/28/80
4.	Annotation of existing EDA research studies (State-of-the-art)	Vista Research Institute	7/26/79
5.	"EDA Research: An Annotated Bibliography" (State-of-the-art)	Vista Research Institute	11/17/79
6.	To establish an "Economic Development Graduate Fellowship Program" in the field of economic development (Training)	National Institute of Public Management	3/31/80
7.	Supplemental funding for preparation of research papers by 13 graduate fellows (Training)	National Institute of Public Management	3/31/80
8.	Evaluate the research capabilities of minority academic institutions and private sector organizations (Training)	National Institute of Public Management	2/29/80
9.	Internship program (Training)	Midwestern Corporation for Resource Development	3/31/79
10.	To continue and expand the Southern Economic Development Intern Program (Training)	National Society for Internships and Experiential Education	6/27/80
11.	Internship program (Training)	Western Interstate Commission for Higher Education (WICHE)	3/31/80
12.	Internship program (Training)	Education Development Center (EDC)	3/31/80

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